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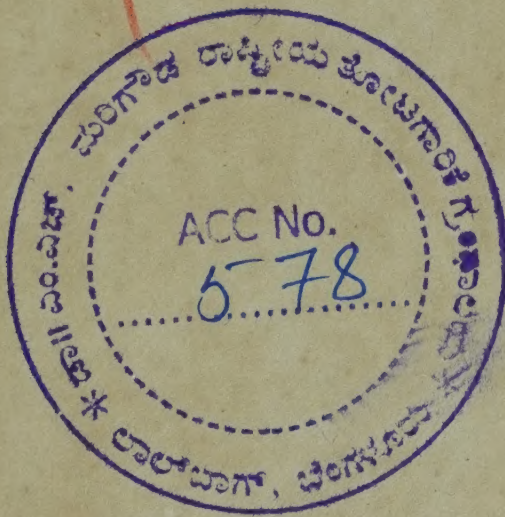
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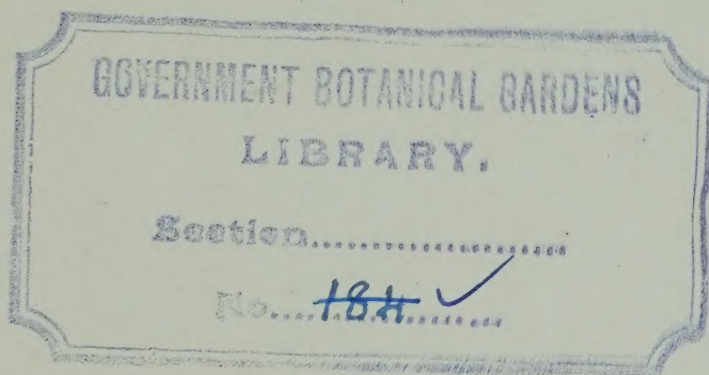
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CURTIS'S
BOTANICAL MAGAZINE
DEDICATIONS
1827-1927



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CURTIS'S BOTANICAL MAGAZINE DEDICATIONS

1827-1927

PORTRAITS AND BIOGRAPHICAL NOTES

COMPILED BY

ERNEST NELMES

Assistant Botanist, Kew

AND

WILLIAM CUTHBERTSON, V.M.H.

Chairman, Dobbie and Co. Ltd., Edinburgh

Seed Growers to H. M. The King

1841
7-3-32

Government of Karnataka



Dr. M. H. Marigowda National Horticulture Library

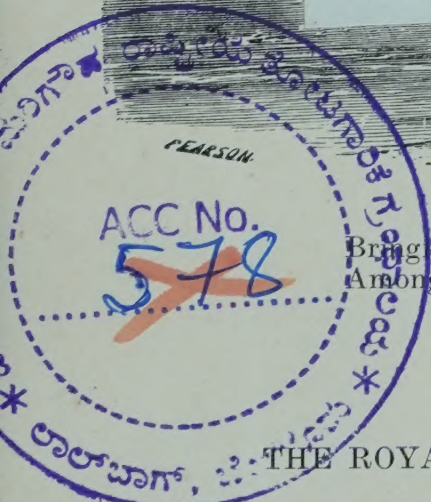
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Bangalore - 560 004

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CALL No.



"With tender heed,
Bringing thee chosen plants and blossoms blown
Among the distant mountains."—Wordsworth.

PUBLISHED FOR

THE ROYAL HORTICULTURAL SOCIETY, LONDON

BY

BERNARD QUARITCH LTD.

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INTRODUCTION

I HAVE to thank my friend, Mr. Thomas Hay, M.V.O., V.M.H., Superintendent of the Central Parks, London, for first interesting me in this work. We are colleagues on the Council of the Royal Horticultural Society and meet frequently in London. On one of these occasions Mr. Hay told me he was collecting portraits of the eminent Botanists and Horticulturists to whom the *Botanical Magazine* had been dedicated for the past century, 1827-1927. It occurred to us both that a Supplementary Volume of the *Botanical Magazine* containing the hundred portraits, accompanied by biographical notes, would interest and appeal to a wide circle at home and abroad. After consideration I decided to undertake responsibility for the preparatory work.

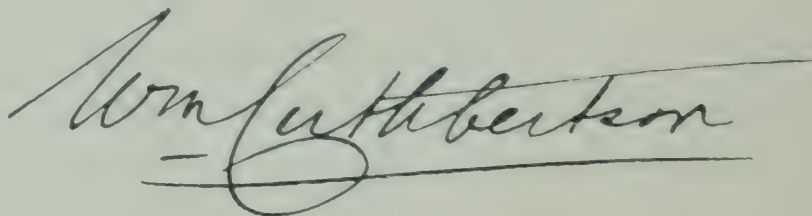
Mr. S. A. Skan, the Librarian of the Herbarium at Kew, was consulted, and he suggested that, subject to the approval of the Director, Mr. E. Nelmes of the Herbarium Staff, and Mr. G. Atkinson the Artist, might during unofficial hours undertake the preparation of the necessary biographies and the assembling and copying of the requisite portraits. The Director, Sir A. W. Hill, K.C.M.G., F.R.S., having kindly sanctioned the arrangement, the Royal Horticultural Society was approached, and the Council at once agreed that the work should be prepared as a special volume of the *Botanical Magazine*, and accepted my offer to arrange for its production and issue. The Council also agreed that in all future volumes a portrait of the dedicatee should appear, and the first appears in the volume for 1928 ; thus continuity is secured.

I have to acknowledge especially the splendid work of Mr. Nelmes and the help received from Mr. Hay, Mr.

INTRODUCTION

E. A. Bowles, Mr. R. Kilpatrick, Managing Director of Messrs. T. & A. Constable Ltd., and that of Lt.-Col. F. R. Durham, the Secretary of the Royal Horticultural Society.

Messrs. Quaritch are acting as publishers, and it is my wish that the total amount accruing from sales shall go to the credit of the *Botanical Magazine* account of the Royal Horticultural Society.

A handwritten signature in cursive script, reading "Wm L. Herbertson", written over a horizontal line.

DUDDINGSTON,
EDINBURGH,
December 1931.

PREFACE

THE hundred personalities portrayed in picture and prose within this book cannot all be described as professional botanists or horticulturists. Many of them would be classed as amateurs in one or other of these sister pursuits, giving precious leisure without stint to the greatest of all hobbies—the study of plants—from such professions as Art, Banking, Politics, the Church, Medicine, the Army and Navy, and the Civil Service.

Are there class distinctions among naturalists? If this book contains an answer it would appear to be an emphatic negative. Gardeners as well as Dukes and Earls have been honoured in the *Botanical Magazine* dedications. They appear side by side between these covers without the slightest appearance of incongruity. Is not this because there is one common characteristic, in most cases strongly developed, by which they may be placed in one category? That is their love of nature. They would all heartily agree with the poet who declared: ‘A garden is a lovesome thing.’

It has been no easy task to collect the material for this century of biographies, but it has proved interesting, amusing, and even exciting at times. A work of this nature entails far more search and research than is at all apparent in the result. Precise dates of birth are given in more than ninety of the biographies, and some of these appear never to have been recorded in print before. The date of death is given in every case, excepting, of course, that of those happily yet with us.

A few of the portraits have proved extremely elusive. These were eventually discovered mainly through the efforts

PREFACE

of Lt.-Col. F. R. Durham, Secretary of the Royal Horticultural Society, by persistent appeals through the press and the post. These appeals were made when search after search through illustrated works at the British Museum and other libraries had been in vain.

There is not space available to thank individually all the kind people who have helped to make this work as complete as it is. The Introduction acknowledges the assistance of those who made it possible to undertake the task. Here are the names of some who lent a hand during its progress.

Professor Wright Smith contributed the account of George Forrest ; Mr. Grove that of J. C. Williams ; Sir David Prain supplied the material from which was prepared the story of S. T. Heard ; Viscount Doneraile sent the notice of Lady Doneraile ; Mr. Skan wrote about Lady Thiselton-Dyer ; Mr. Besant supplied data concerning Sir Frederick Moore ; and Mr. Hughes Clarke of Wimbledon gave help with G. C. Joad. Notes about themselves were supplied by some of the living ; and relatives or descendants of several of the deceased gave useful facts, notably the Dowager-Countess of Dalhousie and Colonel Henty of Chichester. It was made possible to write such complete accounts of Leichtlin, Ludwig, and Salm-Dyck by the help of Mr. C. E. C. Fischer. Mr. S. A. Skan was so good as to read through the typescript and made valuable suggestions.

Acknowledgment of the source of the portraits is made at the foot of each. It should be noted that between fifty and sixty were reproduced from copies in the Kew collection placed at our disposal by Sir Arthur Hill. There were many who joined in the search for those which proved difficult to trace. Prominent among these were the late Mr. Bliss and Dr. Broughton Twamley, who made great efforts to find a picture of Mrs. Wray ; and Mr. Bijoux, who helped in the hunt for Telfair's portrait.

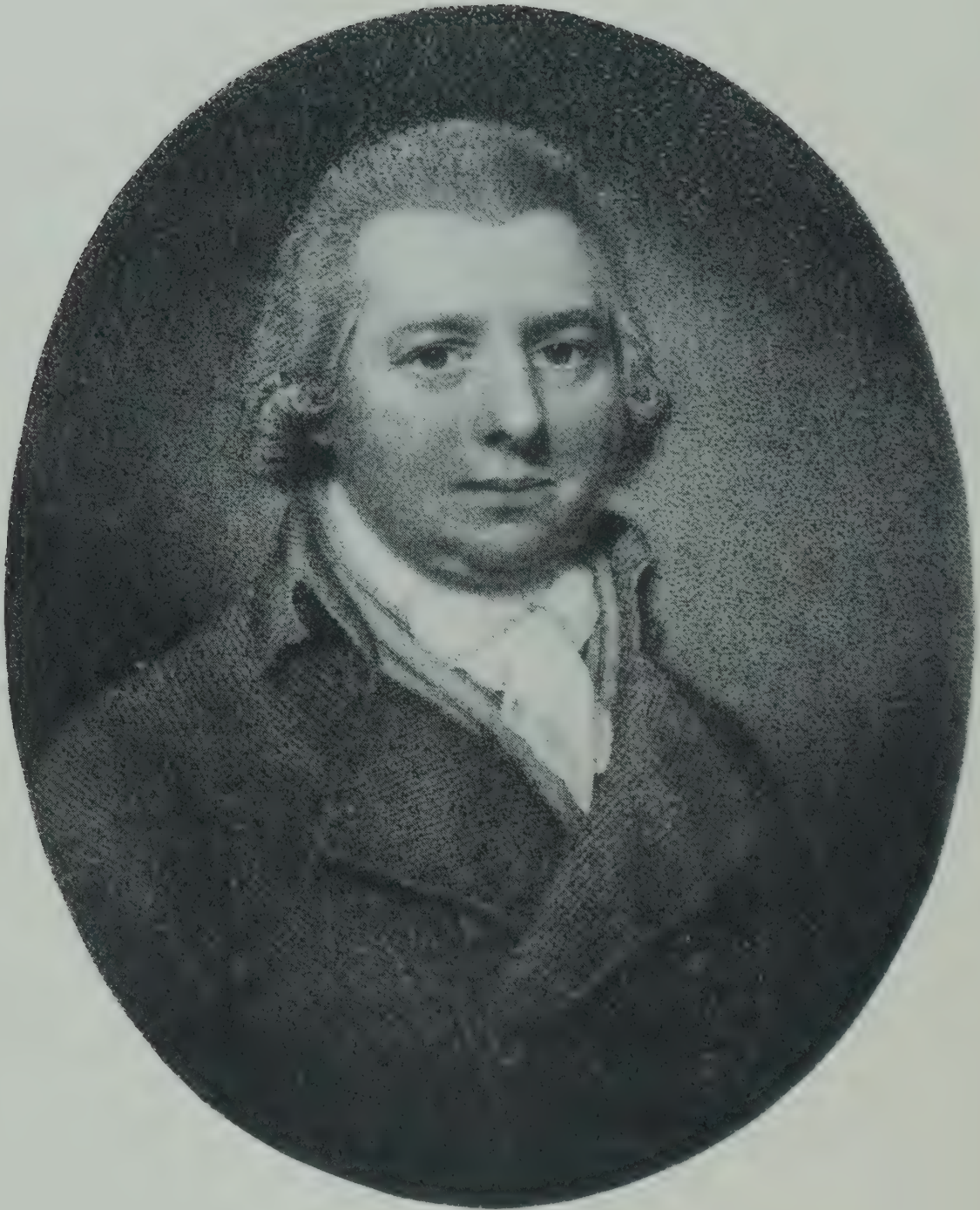
PREFACE

The headings to the biographies have been made to agree closely with the names and titles as given in the dedications. There are, however, discrepancies in the original dedications, and these have been followed.

I believe in attempting to disarm criticism in advance, and therefore claim this final, personal paragraph for that purpose. For the biographies, with the few exceptions mentioned above, I am responsible, and I wish to make it clear that, owing to the necessity of restricting each account as nearly as possible to 400-500 words, the result does not do full justice to many of the subjects. In the great majority of the lives most of the personal, peculiar, amusing, interesting—in short, the ‘readable’—items have had to be omitted. You will read that the great Baron von Mueller was born on such a date, was given this and that post, and was awarded a number of honours; but there is no room to record that he always wore wooden shoes, that he never possessed a mirror, and that he wrote ‘thousands’ of letters in his own hand during every year of his official life. Here is another example (and this is my last word) which will make this point quite clear. I have given Sir Joseph Hooker about fifty per cent. more than the minimum space, so that he takes up two full pages. But a list of his published works alone claims sixteen similarly sized pages at the end of his obituary notice in the *Kew Bulletin*.

E. NELMES.

THE FOUNDER



WILLIAM CURTIS

FOUNDER OF THE 'BOTANICAL MAGAZINE'

WILLIAM CURTIS

(1746-1799)

WILLIAM CURTIS, founder of the *Botanical Magazine*, was born at Alton, Hampshire, on the 11th of January, 1746. His great-grandfather, Thomas Curtis, physician and maltster, was born in 1660, lived for a time at Horsham, Sussex, and joined the early Quakers. John Curtis, son of Thomas, was a surgeon-apothecary, and resided at Alton next door to the Crown Inn. John Curtis's son, also John, was a tanner, and he belonged to the Society of Friends like his father and grandfather. He had four sons and two daughters, the eldest of the six being William, the subject of this biography.

At about the age of eight William Curtis was placed under the care of Mr. Vindin, who kept a good school a mile or two from Alton. He attended this school until he was fourteen when, much against his inclination, he was apprenticed to his grandfather, the Alton apothecary.

From an early age Curtis showed a taste for natural history, and his grandfather tried in vain to turn the young man's thoughts from 'weeds' and insects to the study of medical science. He was encouraged in his fondness for wild life by an ostler, Thomas Legg, who was employed at the Crown Inn next door to his home. This man, though illiterate, had gained so complete a knowledge of plants with the aid of the herbals of Parkinson and Gerard that he could name the wild flowers of the neighbourhood without hesitation.

At the age of twenty Curtis went up to London to complete his medical studies at St. Thomas's Hospital, and for a short time was assistant to Mr. George Vaux, of Pudding Lane. He next became associated with Dr. Thomas Talwin, a Quaker, who had long lived at 51 Gracechurch

WILLIAM CURTIS (1746-1799)

Street, and had an extensive practice. This practice passed to Curtis at Talwin's death, but his love for natural science was so strong that he found it necessary to take on a partner in order to prevent a collapse of the business. To this gentleman, whose name was Wavell, Curtis soon disposed of his share in the practice and devoted himself entirely to botany.

William Hudson, author of the well-known *Flora Anglica*, resigned from the position of Demonstrator of Botany to the Apothecaries' Company at Chelsea early in 1771, and nearly two years later Curtis was given the post on the recommendation of Mr. Alchorne, of the Mint, who had been officiating *pro tempore*. Philip Miller, author of the *Gardener's Dictionary*, was a former holder of this office, which was 'more honourable than lucrative.' Curtis took up his duties, which consisted in familiarising the apprentices of the Apothecaries' Society with the medicinal plants in Chelsea Gardens, with great ardour, and initiated a series of lectures on medical botany to his pupils.

He bought land near Grange Road, Bermondsey, and formed a botanic garden there. Associated with him in this undertaking was Thomas White, brother of the Rev. Gilbert White, the famous Selborne naturalist. It was about that time that Curtis conceived the idea of publishing his *Flora Londinensis*, as, in addition to the valuable co-operation of White, he made the acquaintance of William Kilburn, a very talented artist. He established a second and larger botanic garden at Lambeth Marsh, where he grew a greater number of British plants than had been brought together before. Finally, in 1789, he founded one of still greater extent, with a better soil and in a purer air, at Brompton. This he maintained until his death, after which it was kept going by William Salisbury, author of the *Hortus Paddingtonensis*, and re-established later at Sloane Street. Curtis received gifts of plants for his garden at Lambeth Marsh from 'His Majesty's matchless collection . . . in the Royal Garden at Kew,' from Sir Joseph Banks, the Earl of Bute, the Rev. Dr. Goodenough of Ealing, Mr. Sole of Bath, and

WILLIAM CURTIS (1746-1799)

many others. The garden was divided into quarters, devoted respectively to medicinal, culinary, common poisonous, and British plants. Seven editions of the catalogues of these plants were issued. The first appeared in 1783, and contained descriptions of about six thousand plants.

In 1777 Curtis resigned his Chelsea post to gain more time for his increasing literary work and public demonstrations in botany and horticulture. He made a considerable contribution to botanical literature, and he also retained an early interest in entomology, his first published work being on this subject. This was a pamphlet entitled *Instructions for Collecting and Preserving Insects*, which appeared in 1771. In the following year he published his translation of the *Fundamenta Entomologiae* of Linnæus. Then came the work which established his growing reputation. This was the *Flora Londinensis*, a splendidly illustrated folio publication in six fascicles of seventy-two plates each, issued from 1775 to 1798, when, owing to the great cost of its production, it had to be abandoned though not near completion. Not more than three hundred copies were sold.

In the early seventeen-eighties Curtis formed the idea of producing a botanical magazine of octavo size to appear in monthly numbers, each of which was to contain three plates and three descriptions of plants, and to be sold at not more than a shilling. On discussing this project with his friends, he was strongly urged to carry it into effect. Mr. Robert Barclay, of Bury Hill, Dorking, Surrey, was particularly desirous of this, and was among the most sanguine of those who prophesied its success. The first number of the *Botanical Magazine* appeared on the 1st of February, 1787 (though eight plates bear the date 1786), in the form suggested, and was issued regularly by Curtis down to his death. Afterwards it was continued in turn by Dr. John Sims, Samuel Curtis, Sir W. J. Hooker, Sir J. D. Hooker, Sir W. T. Thiselton-Dyer, Sir D. Prain, and Dr. O. Stapf. Though aged, it continues, more healthy perhaps than ever. The *Magazine* had the good sale of about two thousand current copies, and was the only one of Curtis's publica-

WILLIAM CURTIS (1746-1799)

tions which yielded him a profit. It was the first of illustrated botanical periodicals, but competitors soon began to appear. The publication of one of these, the *English Botany* of Smith and Sowerby, Curtis unfortunately viewed as an act of hostility to himself, and his friends had great difficulty in removing this erroneous idea. It caused him to sever his great friendship with Dr. Smith, and even brought about his estrangement from the Linnean Society, of which he was one of the original Fellows and which contained a large number of his personal friends. The wound was eventually healed. Two other productions of Curtis must be mentioned. His *Practical Observations on the British Grasses*, first published in 1787, ran to several editions, and his *Lectures*, delivered in the Botanic Garden at Lambeth, were published in three volumes in 1804-05 under the editorship of Samuel Curtis, his first cousin, who married in 1801 William's adopted daughter, Sarah Caustin.

His brother Thomas managed his publishing business at No. 3 St. George's Crescent, St. George's Fields, Blackfriars Road.

Curtis was something of an artist, and the anonymous plates in the first and second volumes of the *Botanical Magazine* were probably his work. But he felt the need of a good draughtsman to work under his guidance, and he had the good fortune to discover Sydenham Edwards, who became a celebrated botanical artist, and for some years was the sole illustrator of the *Magazine*. He also accompanied Curtis on excursions into the country to draw any curious bird or insect that was shot or captured. Before the coming of Edwards two other artists had been employed by Curtis, Kilburn and James Sowerby. The former was soon enticed away by some leading calico printers of that day, who offered him better pay.

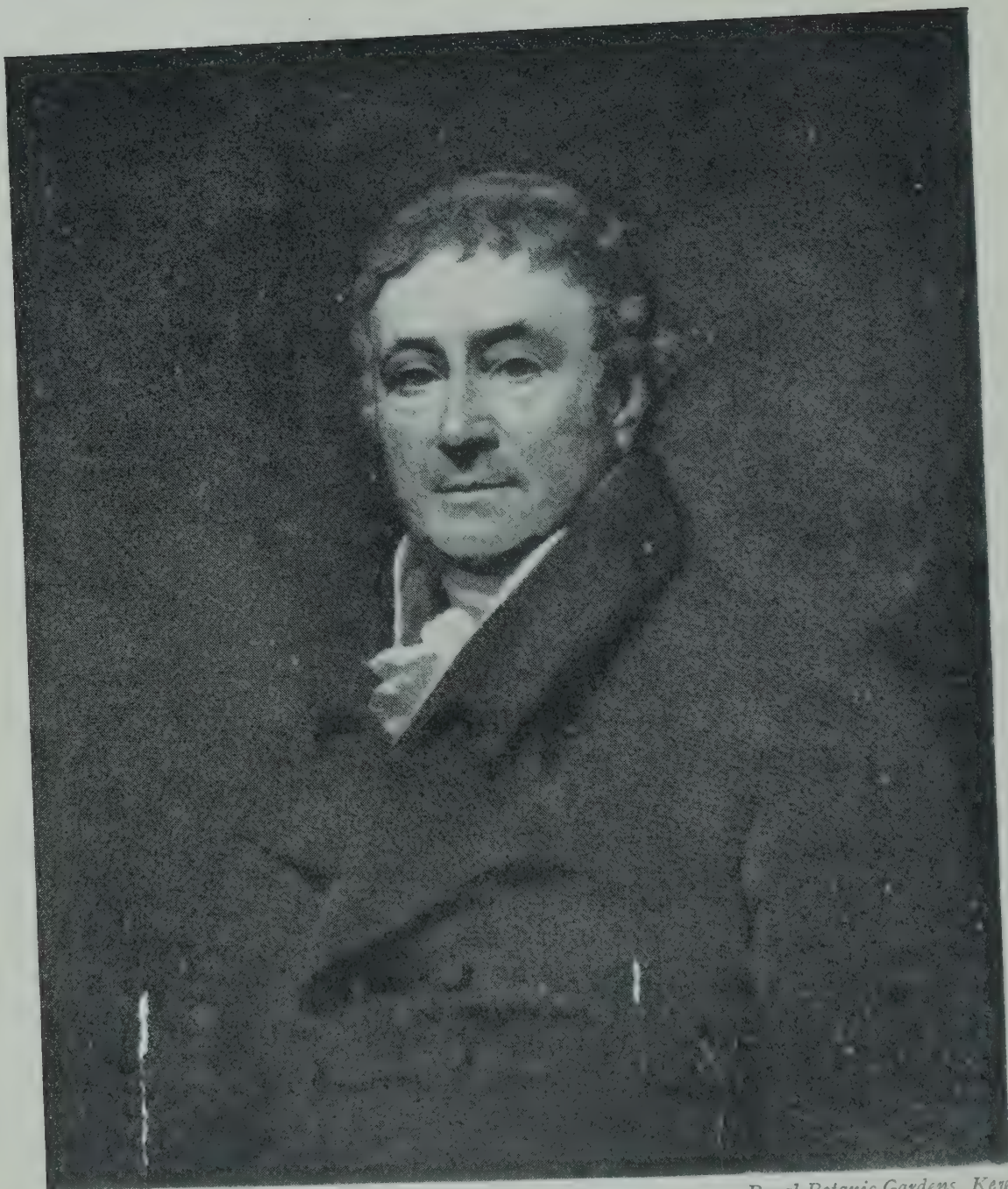
In 1788 Curtis was elected a Fellow of the Linnean Society. This was the year of its establishment. His name was commemorated in 1789 by the elder Aiton in *Curtisia faginea*, a member of the *Cornaceae*, which was discovered at the Cape by Masson in 1775. All the eminent natural-

WILLIAM CURTIS (1746-1799)

ists of the time—Sir Joseph Banks, Dryander, Goodenough, Sims, Sole, Withering, and others—courted his friendship. ‘ I have no pretensions,’ he said in memoirs left with Sims, ‘ to be considered as a man of letters, or of great mental powers. A consciousness of my inabilities makes me diffident, and produces in me a shyness, which some have been ready to construe into pride.’

During the last year or two of his life Curtis suffered from an affection of the heart, and he died at Brompton on the 7th of July, 1799. The following lines are inscribed on his tombstone in Battersea churchyard :

‘ While living herbs shall spring profusely wild,
Or gardens cherish all that’s sweet and gay,
So long thy works shall please, dear Nature’s child,
So long thy memory suffer no decay.’



Royal Botanic Gardens, Kew.

ROBERT BARCLAY, ESQ.
OF BURY HILL, IN THE COUNTY OF SURREY

TO WHOM VOLUME LIV.

IS DEDICATED

1, 1827.

W. J. HOOKER.

ROBERT BARCLAY

(1751-1830)

ROBERT BARCLAY, son of Alexander Barclay and great-grandson of Robert Barclay of Urie, the great Quaker apologist, was born at Philadelphia, Pennsylvania, on the 15th of May, 1751. Though active in the commercial world, from an early age he devoted a considerable amount of time to scientific pursuits. He married the first of two wives in 1775 and by her had a large family.

In 1781 he went to reside at Clapham, where he developed a taste for gardening. This new interest led to his becoming acquainted with the leading British horticulturists and botanists of the time, such as the elder Aiton, Sir Joseph Banks, and William Curtis. He 'strenuously advised Curtis,' as Sir William Hooker records, 'to the publication of the *Botanical Magazine*, and foretold the great success it would experience from the British public.' He was one of the original Fellows of the Linnean Society of 1788.

Barclay removed to Bury Hill, Surrey, in 1805, and purchased the estate in 1812. He gave over to his eldest son the active share in his business, and devoted himself on an increasingly larger scale to the cultivation of rare and beautiful exotics, besides giving attention to the study of botany and to experiments in agriculture. By a lavish expenditure of skill and wealth he endeavoured to add to the great natural beauty of his estate. To the existing range of glass-houses, which he used as a conservatory, were added hot-houses for the occupation of plants from the tropics. In the outdoor garden, besides a wealth of hardy plants, was an unusually large proportion of half-hardy subjects, the successful cultivation of which demonstrated the skilful methods of their owner and his gardener, Cameron. Some of the trees he planted about 1815 are still there. Many of

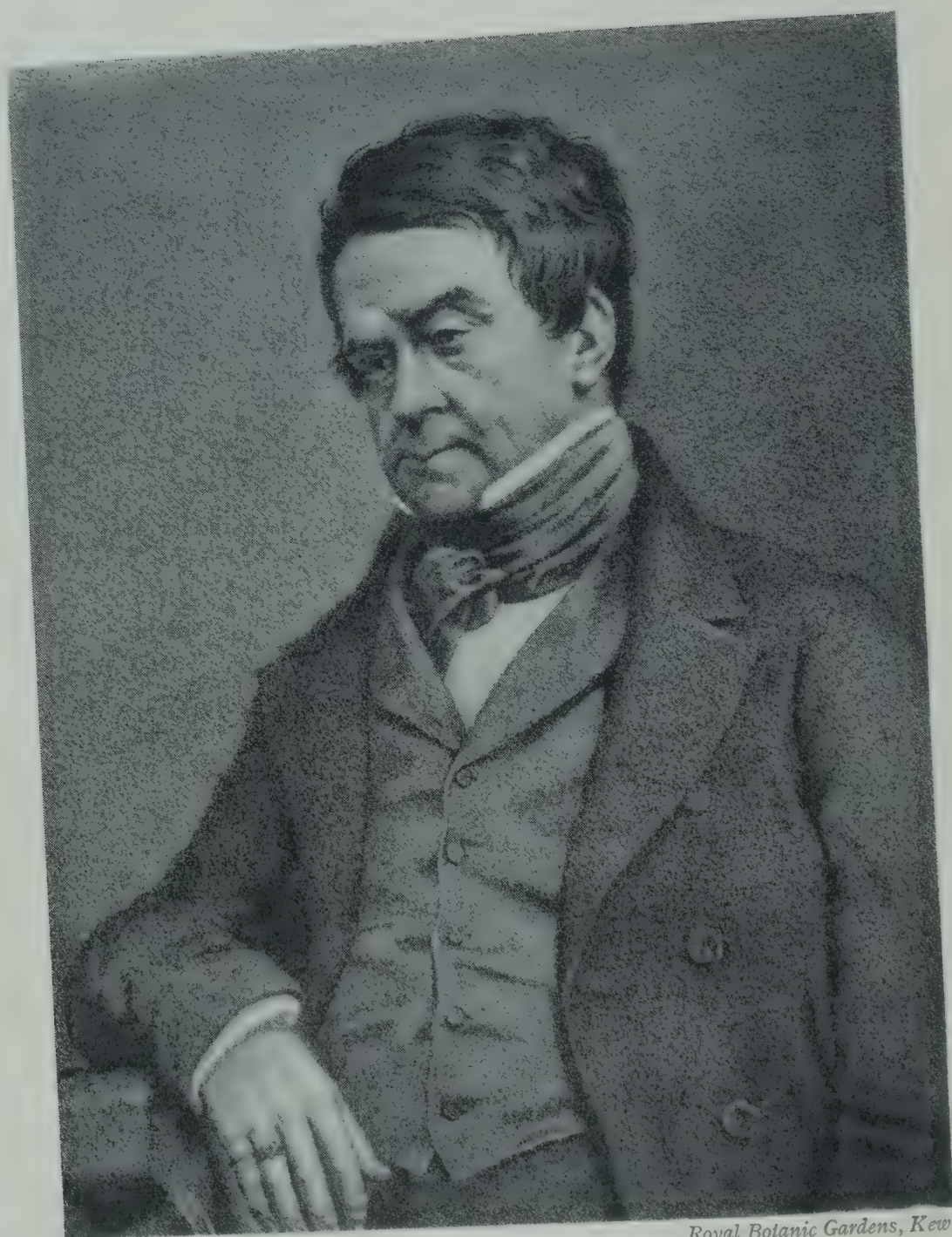
ROBERT BARCLAY (1751-1830)

his choicest treasures came from his friend Charles Telfair, of Mauritius, who in his turn was the recipient of equally generous gifts from Barclay. In one of the letters from Telfair to his friend mention is made of blessings conferred by Barclay on Madagascar, where 'your apples, pears, and plums are now in great abundance in the markets of the capital, and add to the subsistence as well as the luxuries of a numerous people, and to the countless generations which will succeed them.'

An artist was kept by Barclay to draw the new and rare species as they came into flower, and these drawings were freely distributed for reproduction in botanical periodicals. The *Botanical Magazine*, in particular, was enriched in this way. Among Barclay's introductions to English gardens may be mentioned *Argemone albiflora* and *A. grandiflora*, *Arum campanulatum*, *Clerodendron emirnense*, *Hibiscus liliiflorus* var. *hybridus*, *Hunnemannia fumariaefolia*, *Leschenaultia formosa*, *Poinciana regia*, *Thunbergia alata*, and *T. angulata*.

He realised the value of books in the successful study of plants, and his collection of works on natural science was among the finest in the kingdom. It was sold soon after his death for more than a thousand pounds. Among some of these books purchased by Messrs. Loddiges was one in which his name and the date, 1781, were inscribed in his own handwriting, thus suggesting that his love for botany and gardening had been of at least fifty years' standing.

Barclay died on the 22nd of October, 1830. Wallich, the great Indian botanist, appropriately commemorated this patron of beauty in *Barclaya*, a genus of that most charming of plant families, *Nymphaeaceae*, the water-lilies.



Royal Botanic Gardens, Kew.

WILLIAM TOWNSEND AITON, ESQ.

DIRECTOR OF THE ROYAL GARDENS OF KEW

TO WHOM VOLUME LV.

IS DEDICATED

W. J. HOOKER.

WILLIAM TOWNSEND AITON

(1766-1849)

WILLIAM TOWNSEND AITON was born at Kew on the 2nd of February, 1766. He was the eldest son of William Aiton, a Lanarkshire gardener who, after assisting the famous Philip Miller at Chelsea, took charge of the Botanic Garden at Kew in 1759. The younger Aiton was educated at Chiswick and Camberwell, and when only sixteen years of age was already assisting his father at Kew. He showed a taste for landscape gardening, and was employed in this capacity by many of the great noblemen of his day. On the death of his father, in 1793, he was appointed to succeed him in the management of the Royal Gardens at Kew and Richmond. The royal favour of George III. was generously bestowed upon him, and during the reign of George IV. his architectural skill was employed in extensive alterations made in the gardens at Windsor. Shortly before the accession of Queen Victoria he relinquished all his royal appointments with the exception of that at Kew, from which he retired in 1841.

He made no pretensions to being a botanist, and his published works were few. With the assistance of Sir Joseph Banks and Dr. Dryander, Banks's librarian, he published in 1810-13 a second and enlarged edition of the elder Aiton's *Hortus Kewensis*, in five volumes. In the following year appeared his catalogue, or epitome, of the plants contained in the earlier work, with the addition of 314 names, which brought the total number of species to 11,013. In 1830 the manuscript for a new catalogue was ready but was never printed, and it is likely that this shared the fate of his immense correspondence and some of the Kew records which were burned after his death by his brother, John Aiton.

Aiton was among the founders of the Horticultural Society, and won its Silver Medal in 1817 for a treatise on

WILLIAM TOWNSEND AITON (1766-1849)

the cucumber. During the first half of his career horticulture was in a flourishing state, and collectors were sending home a wealth of plants from the Cape and other places, but he had the misfortune to see, in the later years of his directorship, Kew's decadent period, which was most acute from 1820 to 1841, when the coming of Sir William Hooker ushered in a new era. After his retirement Aiton continued to reside at Kew until his death, which took place on the 9th of October, 1849, while he was on a visit to his brother at Kensington.



Royal Society, London, Nov.

JOSEPH SABINE, ESQ., F.R.S., L.S.

SECRETARY OF THE HORTICULTURAL SOCIETY OF LONDON

TO WHOM VOLUME LVI.

IS INSCRIBED

DECEMBER 1, 1820.

THE AUTHOR.

JOSEPH SABINE

(1770-1837)

JOSEPH SABINE was born at Tewin, Hertfordshire, on the 6th of June, 1770. He was educated for the Bar, but in 1808, when he had practised only a short while, he was appointed an Inspector-General of Assessed Taxes. From this office he retired in 1835.

In 1810 he joined the Horticultural Society, and became Honorary Secretary on the 1st of May of that year. He found the accounts of the Society in great disorder, and his success in reorganising its affairs was rewarded by the bestowal upon him of the Society's Gold Medal in 1816. From then until 1828 the Horticultural Society was in a very flourishing condition, due mainly to the enthusiastic exertions of Sabine. The number of Fellows was greatly increased, the Society's garden established at Kensington and later at Chiswick, and David Douglas and others were sent out as plant collectors.

The collection of fruits in the Garden was said to be the finest in the world. These improved fruits, as well as better varieties of flowers and vegetables, were distributed throughout the country to take the place of the inferior sorts hitherto grown.

To this prosperity there was a sad sequel. Sabine became despotic in his management of the Society's affairs, taking a too optimistic view of the future, which caused the Society to incur a debt of some considerable size and which nearly led to its dissolution in 1830. After the appointment of a committee of inquiry he resigned.

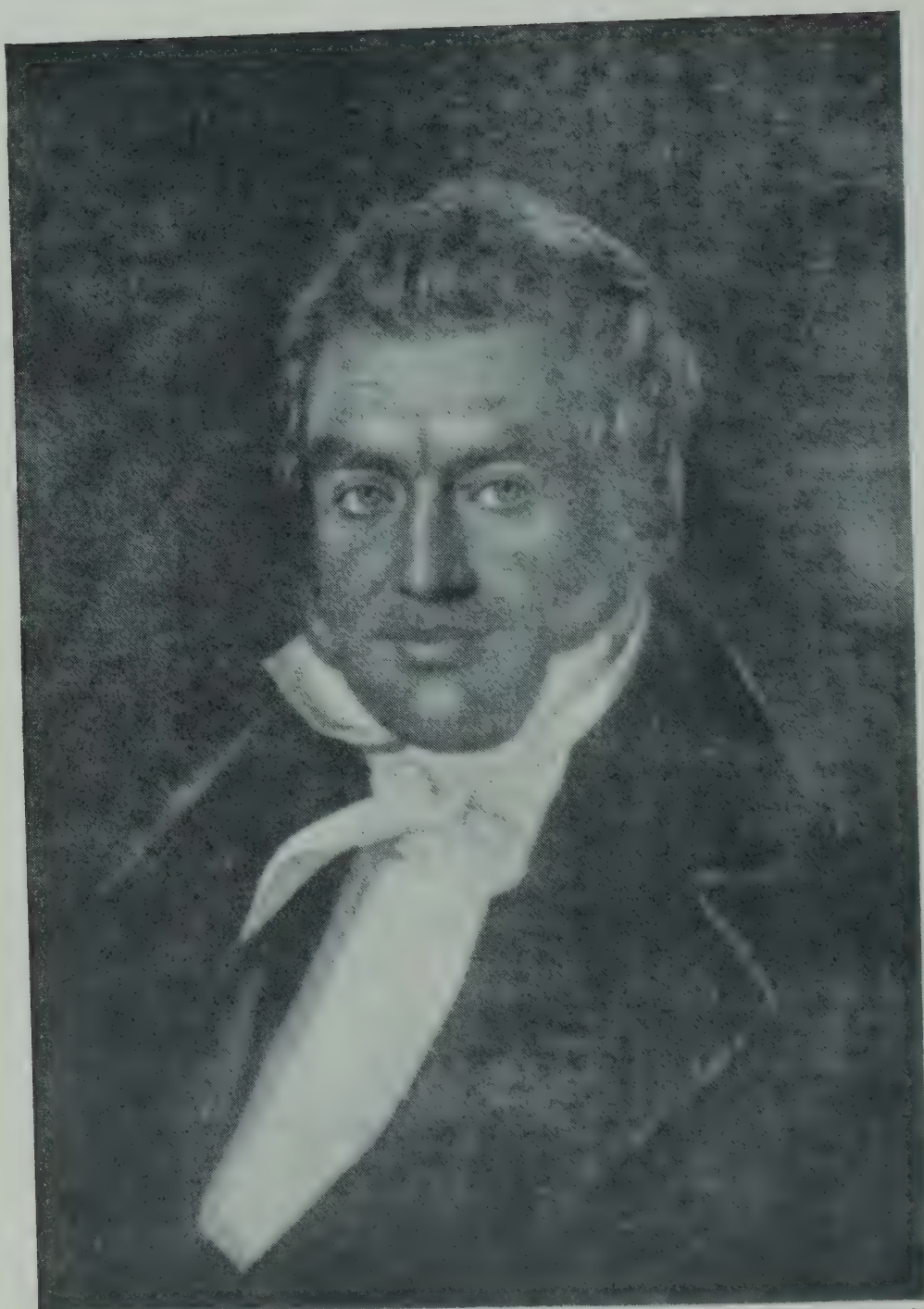
He afterwards became an active member of the Zoological Society, increasing its collection of animals and adding many ornamental plants to its Garden in Regent's

JOSEPH SABINE (1770-1837)

Park. He served as Treasurer and Vice-President. On British birds he was an authority.

Many papers from Sabine's pen appeared in the *Transactions of the Horticultural Society*, and descriptions by him of new species of birds were published in the *Transactions of the Linnean Society* between 1818 and 1824. He was also author of the zoological appendix to Sir John Franklin's *Narrative of a Journey to the Shores of the Polar Sea in 1819-22*, published in 1823.

Sabine was elected a Fellow of the Linnean Society in 1798, and a Fellow of the Royal Society in 1799. His name is commemorated in the leguminous genus *Sabinea*. He died in London on the 24th of January, 1837.



Royal Society of Arts and Sciences, Port Louis.

CHARLES TELFAIR, ESQ.

OF THE MAURITIUS

TO WHOM VOLUME LVII.

IS DEDICATED

GLASGOW, DECEMBER 1, 1830.

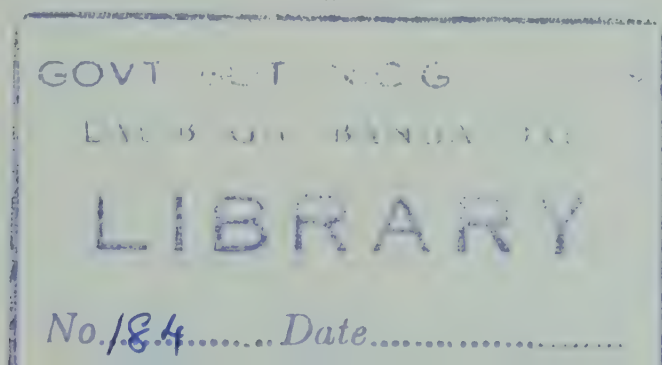
THE AUTHOR.

CHARLES TELFAIR

(1778?-1833)

CHARLES TELFAIR was born at Belfast about 1778. He served as surgeon with the squadron which blockaded Mauritius in 1810, and afterwards settled there and practised his profession. He also held the posts of Government Secretary in the island of Bourbon and Private Secretary to Sir Robert Farquhar in Mauritius. In addition he was styled Guardian of Vacant Estates and Secretary to the Vice-Admiralty Court. Following the British occupation of Mauritius in 1810, he seems to have been singularly successful in faithfully discharging his official duties and at the same time gaining the confidence and esteem of a people who, through the fortune of war, had been vanquished by his countrymen and been made to suffer a change of rulers.

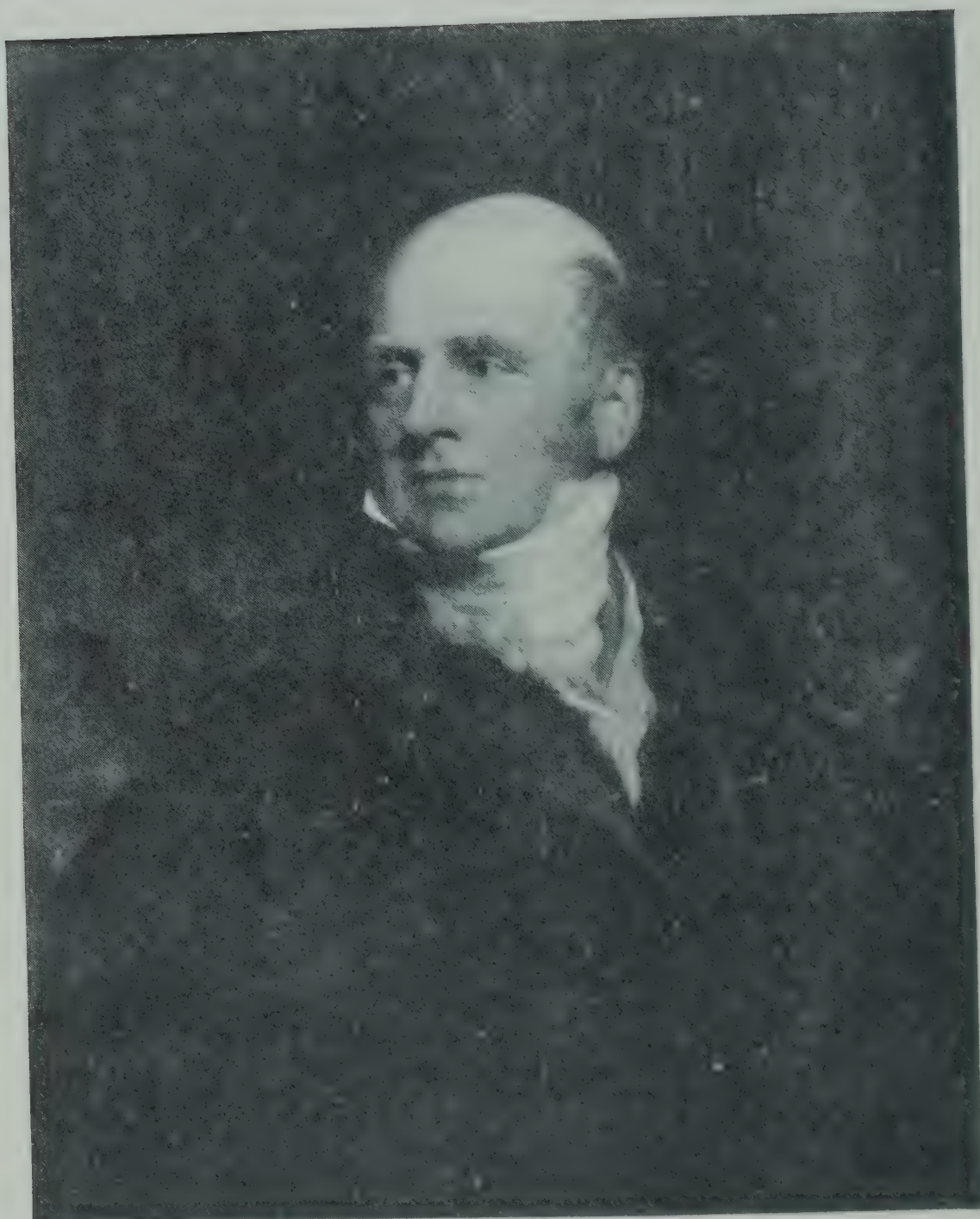
Science in general, and natural science in particular, owed much to Telfair. He established botanic gardens at Mauritius and Réunion, became a correspondent of W. J. Hooker, then Professor of Botany at Glasgow University, and sent plants to Kew. Another of his correspondents and friends was Robert Barclay, of Bury Hill, Surrey, to whom he sent seeds and plants from Mauritius, as well as fruits of *Lodoicea Sechellarum*, the famous double coconut from the Seychelles, and many novel and useful plants from Madagascar and the African mainland. In addition, in the words of Dr. W. J. Hooker, 'the seas were ransacked for shells and corallines; and birds and quadrupeds, both living and dead, were equally transmitted to Mr. Barclay.' In 1827 Hooker commemorated his name in *Telfairia*, an African genus of *Cucurbitaceae*, the seeds of which Telfair sent to Barclay from Mauritius in 1825. He was also in touch with other European scientists and institutions. His wife, whose death occurred in 1832, sent Hooker specimens



CHARLES TELFAIR (1778?-1833)

and drawings of Mauritius algae. Bones of the solitaire were collected by Telfair at Rodriguez, and sent to the Zoological Society of London and to the Andersonian Museum, Glasgow.

His work, *Some Account of the State of Slavery at Mauritius since the British Occupation in 1810, in Refutation of Anonymous Charges . . . against Government and that Colony*, was published at Port Louis in 1830. He died in that town on the 14th of July, 1833.



Courtesy of the present Duke.

HIS GRACE
JOHN, DUKE OF BEDFORD

TO WHOM VOLUME LVIII.
IS DEDICATED

GLASGOW, DECEMBER 1, 1831.

W. J. HOOKER.

JOHN, DUKE OF BEDFORD

(1766-1839)

JOHN RUSSELL, sixth Duke of Bedford, was born on the 6th of July, 1766, the second son of Francis, Marquess of Tavistock. Quite early in life he was an officer in the Bedfordshire militia, and an ensign in the 3rd Regiment of Foot Guards from 1783 to 1785. But he soon became attracted to politics, and at a by-election in 1788 he was returned to Parliament, under the name of Lord John Russell, as one of the members for Tavistock, and continued to sit for that borough until his accession in 1802.

He married in 1786, and until his wife's death in 1801 they lived at Stratton Park, Hampshire. After succeeding to the title he removed to the chief family seat, Woburn Abbey, Bedfordshire. His only public office was the Lord-Lieutenancy of Ireland during the Whig administration of 1806-07. The Duke married again in 1803. A son of the first marriage became the famous statesman, Lord John Russell.

Travels on the Continent took him to Italy, where he made and brought back to Woburn a splendid collection of ancient sculptures.

The Duke was a good landlord. His cottages were well built and let at low rentals, and a hundred guineas were given to the clergyman of the parish every Christmas to be distributed in meat, fuel, and clothing. The Church had in him a great patron, 'evangelical' and 'orthodox' being treated with equal generosity. In 1830 he had a part of Woburn Church rebuilt at a cost of £4,000. About the same time he spent ten times that sum on a new Covent Garden Market.

Like his brother Francis, whom he succeeded, the sixth Duke did much to promote the interests of agriculture. He

JOHN, DUKE OF BEDFORD (1766-1839)

made a special study of grasses and associated fodder plants. That fine work, the *Hortus Gramineus Woburnensis*, first published in 1816, though avowedly the work of His Grace's gardener, George Sinclair, was issued at his expense and, to a considerable extent, prepared by himself. The book is illustrated with dried plants, and it went into several editions. This diffidence in putting himself forward as an author is also shown by the Duke in other works, to be mentioned, which emanated from Woburn. His interest in agriculture was largely actuated by the utility of the subject, but an increasing attraction to plants for the sake of their beauty led him to their botanical study and ardent cultivation. His attention was directed to the heaths and, with the aid of Sinclair, he soon possessed four hundred distinct species which he housed in a conservatory, ninety feet in length, erected by Sir J. Wyatville. As a sequel, the *Hortus Ericaeus Woburnensis*, a handsome quarto volume, appeared in 1825. Four years later came the *Salictum Woburnense*. Trees, especially the *Coniferae*, now began to interest the Duke, and in 1839 was published his last and finest work, *Pinetum Woburnense*. This handsome book, of which one hundred copies only were printed, consists of over two hundred pages of text illustrated with sixty-five coloured plates.

He was a frequent correspondent of Hooker's in the eighteen-thirties, both men being zealous in the cause of the reformation of Kew into, in the Duke's words, 'a great National and Royal Botanic Garden.' He was a generous patron of botanical expeditions such as that of Schomburgk to Guiana. *Bedfordia*, a genus of *Compositae*, was named in his honour in 1833, and he is commemorated also in that well-known and beautiful cactus, *Epiphyllum Russellianum*. The Linnean Society elected him a Fellow in 1816. He was made a Knight of the Garter in 1830. His death occurred in Perthshire on the 20th of October, 1839.



Courtesy of G. W. Fitzwilliam, Esq.

THE RIGHT HONORABLE
LORD VISCOUNT MILTON

TO WHOM VOLUME LIX.

IS DEDICATED

GLASGOW, DECEMBER 1, 1832.

W. J. HOOKER.

LORD VISCOUNT MILTON

(1786-1857)

CHARLES WILLIAM WENTWORTH FITZWILLIAM, third Earl Fitzwilliam in the peerage of the United Kingdom, only son of the second Earl, was born at Grosvenor Square, London, on the 4th of May, 1786. He was educated at Trinity College, Cambridge. In 1806 he married a daughter of the first Earl Dundas.

As Viscount Milton he represented first Malton and then Yorkshire in the House of Commons from 1807 through five successive parliaments. In 1830 he was the chosen of Peterborough. With Lord Althorp he was elected member for Northamptonshire in 1831, and he was returned at the elections of the following year for the northern division of that county. This seat he held until his elevation to the peerage at the death of his father on the 8th of February, 1833. Early in his political career he opposed parliamentary reform, but later became its ardent advocate. He was in favour of the repeal of the Corn Laws, though his fortune mainly depended upon the land.

In his support of the Free Trade policy he published, in 1839, his *First, Second, and Third Addresses to the Land-owners of England on the Corn Laws*. With Lieutenant-General Sir Richard Bourke, K.C.B., he edited the *Correspondence of the Right Hon. Edmund Burke between the Year 1744 and the Period of his Decease in 1797*, issued in four volumes in 1844. A *Letter* to a Northamptonshire vicar, setting forth a policy in regard to Irish troubles, was published by Fitzwilliam in 1847.

He was an ardent gardener, and his establishment at Wentworth was noted for rare and beautiful plants. Some of these were figured in the *Botanical Magazine*. In 1837 Lindley gave the name *Miltonia spectabilis* in his honour to

LORD VISCOUNT MILTON (1786-1857)

an orchid representing a new genus, and referred to him as 'one of the oldest and steadiest friends of Natural Science in this country who is only now for the first time fixed among the imperishable records of Botany. Let me hope, however, that the present beautiful genus, selected from among his favourite flowers, will be some atonement to Lord Fitzwilliam for the obliviousness of which I at least have to confess myself guilty.'

The surname Wentworth was adopted in 1856 to mark his descent from the first Marquis of Rockingham. He was the first President of the British Association, in 1831, and was created a Knight of the Garter in 1851. His death occurred at Wentworth Woodhouse, Yorkshire, on the 4th of October, 1857.





Courtesy of T. Hay, Esq.

THE RIGHT HONORABLE
THE COUNTESS OF DALHOUSIE
OF DALHOUSIE CASTLE

TO WHOM VOLUME LX.
IS INSCRIBED

GLASGOW, DECEMBER 1, 1833.

W. J. HOOKER.

COUNTESS OF DALHOUSIE

(1786-1839)

CHRISTIAN BROWN was born on the 28th of February, 1786. She was the only child and heiress of Charles Brown, of Coalstoun, also known as Colstoun, East Lothian, an advocate and a son of George Brown, who sat in the Supreme Court as a judge with the title of Lord Coalstoun. Since those days the name has come to be spelt Broun.

In May, 1805, she was married to George Ramsay, ninth Earl of Dalhousie, who died in 1838 aged sixty-seven. They had three sons, of whom only the third survived and succeeded his father as the tenth Earl. He annexed the Punjaub, Pegu, Nagpore, and Oudh, and was created Marquess of Dalhousie and Punjaub in 1849, while Governor-General of India. The ninth Earl also had a distinguished career. He commanded a division at the Battle of Vittoria towards the close of the Peninsular War, was appointed Governor-General of Nova Scotia in 1816, Governor-in-Chief of North America in 1819, and was afterwards Commander-in-Chief in India.

Christian, Countess of Dalhousie, made collections of plants in Nova Scotia, and in Simla and other parts of India. Her correspondence from 1826 to 1833 with W. J. Hooker, afterwards Director of Kew Gardens, records that she sent him many of her plants. She presented her Indian herbarium, consisting of about twelve hundred specimens, to the Botanical Society of Edinburgh, and was made an Honorary Member of the Society in March, 1837. She is commemorated in the plant genus *Dalhousiea*.

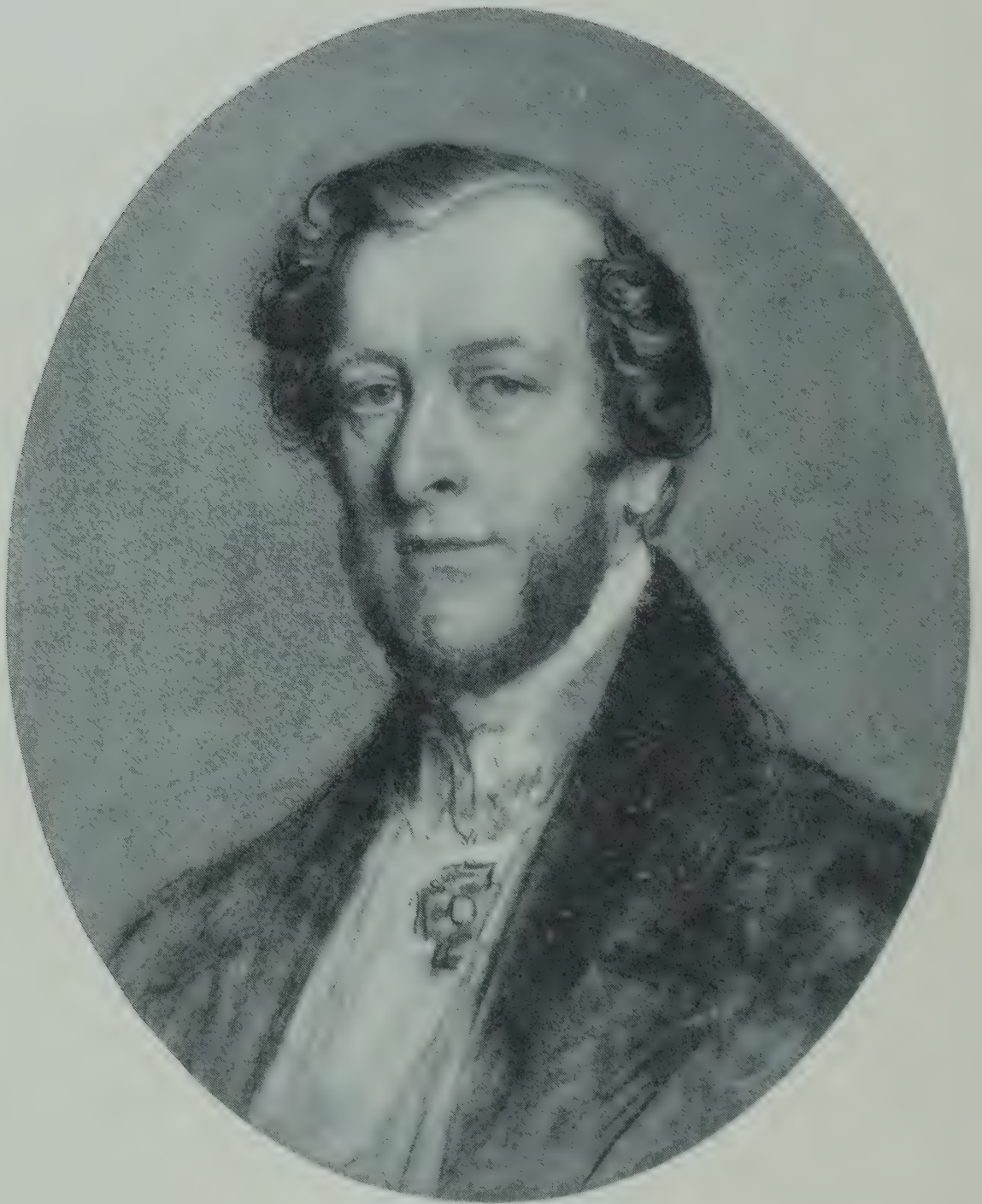
She was a great reader and was much interested in horticulture, ornithology, and art. Many of the books on botany and ornithology which she accumulated are in the possession of the present Earl of Dalhousie, and her collections of

COUNTESS OF DALHOUSIE (1786-1839)

stuffed birds, butterflies, and some of her plants are preserved in her old house at Colstoun.

Dean Ramsay, in his *Reminiscences of Scottish Life and Character*, says that 'Lady Dalhousie was eminently distinguished for a fund of the most varied knowledge, for a clear and powerful judgment, for acute observation, for a kind heart, a brilliant wit.' The latter quality is shown by various stories told of her. One of these relates that at an Edinburgh ball Lady Dalhousie was approached by a certain baronet, famed as a tuft-hunter, who eagerly engaged her for supper as the principal person in the room. Shortly after he returned to announce that he had found that a certain lady was present, a marchioness, and did not Lady Dalhousie think that on the whole he ought to take this lady down to supper. 'Certainly, Sir E., by all means take Lady . . . down to supper. I only hope, for her sake, that you will not meet a duchess on the stairs.'

Lady Dalhousie died suddenly on the 22nd of January, 1839, in Dean Ramsay's house in Edinburgh. She was not destined to live to see the great distinction attained by her beloved son.



Copyright of the Duke of Devonshire.

HIS GRACE
WILLIAM, DUKE OF DEVONSHIRE, K.G.
LORD HIGH CHAMBERLAIN OF HIS MAJESTY'S HOUSEHOLD

TO WHOM VOLUME LXI.

IS DEDICATED

GLASGOW, DECEMBER 1, 1834.

W. J. HOOKER.

WILLIAM, DUKE OF DEVONSHIRE

(1790-1858)

WILLIAM GEORGE SPENCER CAVENDISH, sixth Duke of Devonshire, was born in Paris on the 21st of May, 1790. He was educated at Trinity College, Cambridge, graduating B.A. in 1811 and proceeding LL.B. in 1812.

He succeeded to the dukedom soon after he attained his majority. Though he assisted the Whig cause in the Lords, he never spoke on any of the great political issues of the time. He went on a special mission to Russia at the time of the coronation of the Emperor Nicholas in 1826. It is said that fifty thousand pounds beyond the grant made to him by government was spent on his magnificent retinue.

The Duke had literary taste and was specially interested in the old English dramatic literature. He purchased the library of Thomas Dampier, Bishop of Ely, in 1812 for £10,000, and in 1821 the dramatic collections of John Kemble.¹ He removed many of the pictures from Devonshire House and Chiswick to enrich his gallery at Chatsworth.

In horticulture, too, he was intensely interested, and his gardens at Chatsworth were world renowned. It was there, in November 1849, that *Victoria regia* first flowered in this country. He had a magnificent conservatory erected under the care and from the design of Mr. (afterwards Sir) Joseph Paxton, the famous gardener and manager of his Derbyshire estates. It was 300 feet long, 145 feet wide, 60 feet high, and covered almost an acre of ground, and it served partly as a model for the building erected in Hyde Park at the Great Exhibition of 1851. He also spent lavishly on the upkeep of his country residences at Chiswick, in Middlesex,

¹ This collection was sold to the Huntington Library by the present Duke soon after he succeeded.

WILLIAM, DUKE OF DEVONSHIRE (1790-1858)

Hardwick Hall, Derbyshire, Bolton Abbey, Yorkshire, and Lismore Castle in County Waterford. He sent a gardener named Gibson to the East Indies to collect plants, and this expedition resulted in the acquisition of many fine species, including orchids, which were among His Grace's special favourites. He was elected President of the Horticultural Society on the death of the first holder of that office, T. A. Knight, in 1838. Lindley gave the name *Cavendishia*, in his honour, to an ericaceous genus from South America.

He became a Privy Councillor and was made K.G. in 1827. From 1827 until 1834 he was Lord Chamberlain of the Household of George IV. and William IV. He was also Lord-Lieutenant of Derbyshire. His death took place at Hardwick Hall on the 17th of January, 1858.



Royal Botanic Gardens, Kew.

C. F. H. VON LUDWIG, PH.D.

KNIGHT OF THE WIRTEMBERG CIVIL MERIT AND CROWN ORDERS

TO WHOM VOLUME LXII.

IS INSCRIBED

GLASGOW, DECEMBER 1, 1835.

W. J. HOOKER.

CARL FERDINAND HEINRICH VON LUDWIG

(1784-1847)

CARL FERDINAND HEINRICH LUDWIG was born at Sulz am Neckar, Germany, on the 6th of October, 1784. His father died when the son was still a boy, and his mother returned to her home and married again. Young Ludwig, after leaving school, went as apprentice to an apothecary in Kirchheim. On the completion of his apprenticeship, his mother having died, he was sent by the stepfather to an uncle, a merchant in Amsterdam, who placed him first in a chemist's shop and later in a chemical laboratory.

About a year later a Dr. Liesching, living at the Cape of Good Hope, advertised in the Amsterdam papers for an assistant in his pharmacy business. Ludwig was offered the post and set sail in October, 1805. It was not until the spring of 1816 that he sent news of himself to his family. In the interval he had married a widow who owned a profitable tobacco business in Cape Town. He so improved this business that he became a prosperous and important citizen.

His great hobby was the collecting of natural history specimens. He sent a consignment of plants and insects to the Royal Museum at Stuttgart in 1826, for which he received the Knighthood of the Order of the Royal Crown of Württemberg. In 1828 he took his son Wilhelm to Germany to be educated, and also carried back to his native land a rich collection of mammals, birds, and reptiles. For this the Philosophical Faculty at Tübingen conferred on him the degree of Ph.D. Thus encouraged, he redoubled his efforts on returning to the Cape, and spent much time and money in getting together another large collection. For this he made extensive journeys into the interior of Cape Colony. In 1836 he again paid a visit to Europe with a very fine

CARL F. HEINRICH VON LUDWIG (1784-1847)

collection of scientific specimens gathered from many parts of the world. Among other things were more than six hundred packets of seeds and bulbs, and a large collection of woods. Tübingen, in May, 1837, bestowed upon him its M.D. degree, and in June the Mayor of Stuttgart presented him with the Freedom of the City for himself and his descendants. In recognition of Ludwig's generous gifts to the Württemberg Institute, the King raised him to the rank of Knight Commander of the Order of the Royal Crown of Württemberg. He returned to the Cape in 1838, taking with him agricultural machines and tools from Europe. In that year the first published work on the genera of South African plants, by W. H. Harvey, was dedicated to him. He was a Corresponding Member of the Horticultural Societies of London and Massachusetts.

On waste land near Cape Town he had a house built and laid out a large garden, and he went to great pains to procure plants from all over the world, particularly vegetables and fruits from Europe, which he endeavoured to acclimatize. He bored artesian wells in his garden, and developed it so successfully that it was said to be the finest in South Africa. His estate was known as Ludwigsburg, and Mr. Bowie, Kew gardener and plant collector, was for some years Superintendent there.

In the eighteen-thirties, when the elder Hooker was Professor of Botany at Glasgow University, he sent Ludwig books, living plants, and seeds, and received in exchange seeds, bulbs, and dried plants from the Cape. During his stay in Europe, in 1836-37, Ludwig spent a short time in England and paid a visit to Glasgow.

His death took place at his residence on the 27th of December, 1847.



Royal Botanic Gardens, Kew.

DR. FISCHER

DIRECTOR OF THE IMPERIAL BOTANIC GARDEN OF ST. PETERSBURG

TO WHOM VOLUME LXIII.

IS DEDICATED

GLASGOW, DECEMBER 1, 1836.

THE AUTHOR.

DR. FISCHER

(1782-1854)

FRIEDRICH ERNST LUDWIG FISCHER was born on the 20th of February, 1782, at Halberstadt in the Harz. He was educated under his father's supervision and at the University of Halle. At Halle he applied himself to the study of medicine, in which he obtained his degree in 1804.

Natural history rather than medical practice attracted him, and in his degree year he accepted the post of superintendent of the botanic garden of Count Razoumoffsky, Minister of Public Instruction in Russia, at Gorenki, near Moscow. Papers from his pen were published in the *Mémoires de la Société Impériale des Naturalistes de Moscou*, including: *Revision du Genre Geum*; and *Descriptiones Plantarum Rariorum Sibiriae*. In 1808 he issued a *Catalogue du Jardin des Plantes de Comte Alexis de Razoumoffsky à Gorenki près de Moscou*. A second edition appeared in 1812. He visited England, France, and Germany in 1821, and met many eminent botanists. This led to the enrichment of the plant collection at Gorenki.

In 1823, following the death of Count Razoumoffsky, Fischer was appointed by the Emperor Alexander to be Director of the Imperial Botanic Garden at St. Petersburg. This garden, which had formerly belonged to the Medical College, was in such need of the complete reorganisation undertaken by Fischer that he may justly be regarded as its founder. A library was created, an herbarium established, and many of the valuable plants which he had accumulated at Gorenki were transferred to the garden. In addition, rich collections of plants and seeds were obtained from European and more distant countries. Some of these resulted from scientific journeys, such as that of Baron Karwinsky in Mexico. In 1845 it was found necessary to reconstruct the

DR. FISCHER (1782-1854)

great palm-house of the garden. The new building, described by Fischer and C. A. Meyer in their *Sertum Petropolitanum*, 1846, measured 266 feet in length, 80 feet in breadth, and was 67 feet high. Owing to disagreement over its construction Fischer was compelled early in 1850 to relinquish his directorship. To give up the library, the herbarium, and the living plant collections thus suddenly was a cruel misfortune.

While at St. Petersburg, in 1831, he published a short work on the *Zygophyllaceae* early in the eighteen-thirties; and from 1835 annually for some years he issued, in conjunction with Meyer, and subsequently others, an *Index Seminum*, etc., which contained, in addition to lists of seeds offered in exchange, descriptions of many new plants, chiefly from Siberia.

Towards the end of the year 1850 Fischer was appointed Medical Councillor in the Department of the Minister of the Interior. During his tenure of this office his last botanical publications appeared, chief among them being the *Synopsis Astragalorum Tragacantharum*, illustrated with plates drawn by himself. This was published in 1853.

He became a Foreign Member of the Linnean Society in 1820, and in 1837 the Leopoldino-Caroline Academy of Naturalists elected him under the name of Aiton. The name *Fischeria* was given in his honour to a tropical American genus of *Asclepiadaceae*. His death took place in St. Petersburg on the 17th of June, 1854.



Gardeners' Chronicle.

JAMES BATEMAN, ESQ.

OF KNYPERSLEY HALL, CHESHIRE

TO WHOM VOLUME LXIV.

IS DEDICATED

GLASGOW, DECEMBER 1, 1837.

W. J. HOOKER.

JAMES BATEMAN

(1811-1897)

JAMES BATEMAN was born at Redivals, Bury, on the 18th of July, 1811. He went to Oxford, and took his B.A. in 1834 and his M.A. in 1845. Quite early in life he developed a deep and abiding interest in orchids. When a gentleman-commoner at Magdalen College, Oxford, he was required to write out half the book of Psalms because he had absented himself beyond the prescribed period. He had been detained at a local nursery in the purchase of a living plant of *Renanthera coccinea*, which was the beginning of the fine collection formed by him at Knypersley Hall.

Encouraged and assisted by his father in his botanical proclivities, Bateman sent out to Demerara at the end of 1833 a botanical collector named Colley, chiefly to search for orchids. About sixty species reached this country alive, of which a third were new. One of these was given the name *Batemannia Colleyi* by Dr. Lindley, thus commemorating at once both employer and collector. Bateman contributed an account of the expedition, based on Colley's report, to Loudon's *Gardeners' Magazine* for 1835. In 1834 he became acquainted with G. Ure Skinner, a merchant living in Guatemala, who sent him many living orchids. In less than ten years the finest orchids of Guatemala were in cultivation in England, having first flowered at Knypersley.

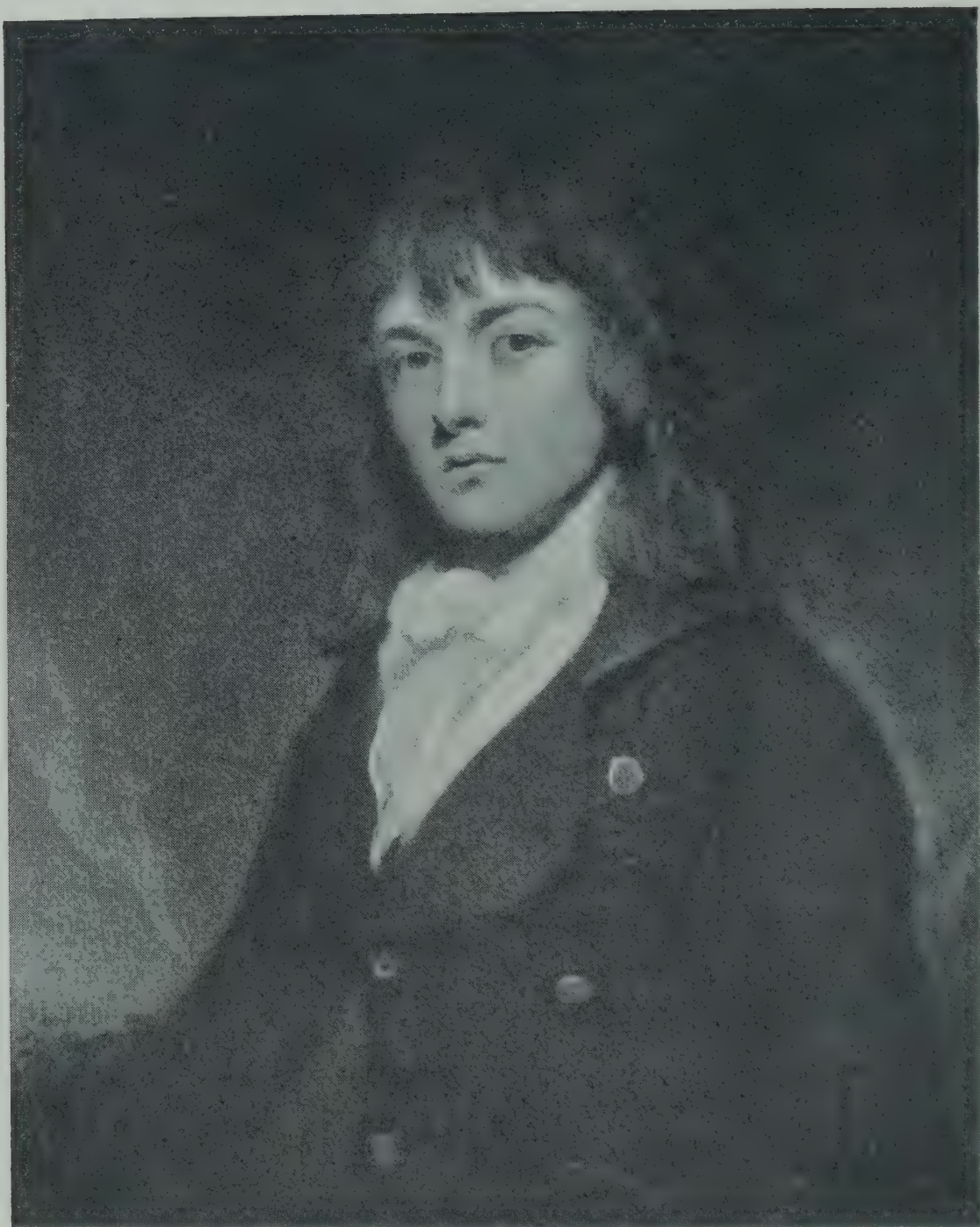
Bateman succeeded in fruiting at Knypersley, for the first time in England, the carambola, *Averrhoa Carambola*.

He was the author of several fine books on the plants he loved. His *Orchidaceae of Mexico and Guatemala*, perhaps the greatest botanical book in point of size ever published, was issued in parts from 1837 to 1843. It consists of forty elephant folio plates, with descriptions and cultural hints, besides numerous sketches by Cruikshank. One of these

JAMES BATEMAN (1811-1897)

represents the opening of a box supposed to contain orchids, from which issue a pair of gigantic cockroaches, grown fat on the original contents, and which are chased by the gardener's family and assistants. The edition was limited to 125 copies at twenty guineas each. After moving to Kensington in 1860, Bateman drew up the text for many of the new orchids figured in the *Botanical Magazine*. These were reissued in 1867 as *A Second Century of Orchidaceous Plants*, the *First Century*, by Sir W. J. Hooker, having appeared eighteen years earlier. During the period 1864 to 1874 the four parts of Bateman's third important work, *A Monograph of Odontoglossum*, were issued. He contributed to the *Gardeners' Chronicle* a series of papers entitled *Dies Orchidiana*, under the nom de plume of Serapias, and he published a *Guide to Cool Orchid Growing* in 1864.

In 1833 he became a Fellow of the Linnean Society and in 1838 a Fellow of the Royal Society. On his removal to London he took a great interest in the Royal Horticultural Society, to which he lectured for many years. This Society awarded him the Veitch Memorial Medal in 1885. He died at Worthing, Sussex, on the 27th of November, 1897.



British Museum.

HON. AND REV. WILLIAM HERBERT
OF SPOFFORTH

TO WHOM VOLUME LXV.
IS DEDICATED

GLASGOW, FEBRUARY 1, 1839.

W. J. HOOKER.

HON. AND REV. WILLIAM HERBERT

(1778-1847)

WILLIAM HERBERT, son of the first Earl of Carnarvon, was born on the 12th of January, 1778. He went first to Eton, and matriculated at Christ Church, Oxford, in 1795. Three years later he graduated B.A. at Exeter College in that University. Subsequently removing to Merton College he proceeded M.A. in 1802, became D.C.L. in 1808, and B.D. in 1840.

He was attracted to politics and was elected M.P. for Hampshire in 1806, and for Cricklade in 1811. In the following year he retired from Parliament and abandoned politics for the Church. In 1814 he was ordained and nominated to the Rectory of Spofforth in the West Riding of Yorkshire. There he remained until his promotion to the Deanery of Manchester in 1840.

Herbert was a classical scholar, and his knowledge of European languages was revealed in his translations from German, Danish, and Portuguese poems. While still at Eton, in 1795, he edited a volume of poems entitled *Musae Etonenses*. *Ossiani Darthula*, a volume of Greek and Latin poetry, appeared in 1801, and *Select Icelandic Poetry*, translated from the originals, was issued in two parts in 1804-06. *Helga*, one of the best of his poems, was published in 1815 and went to a second edition. The epic poem, *Attila, or the Triumph of Christianity*, in twelve books with an historical preface, appeared in 1838, and was the result of many years' labour.

Among Dean Herbert's varied interests natural history occupied an important place. He helped Rennie with the edition of Gilbert White's *Natural History of Selborne* which was published in 1833. For many years he contributed descriptions of plants, particularly bulbous species, to the

HON. AND REV. WILLIAM HERBERT (1778-1847)

Botanical Magazine and the *Botanical Register*. He cultivated a large number of these beautiful plants in his garden at Spofforth. A pioneer in experimental hybridization of plants, and a successful one, he embodied his results and conclusions in an essay contributed to the *Journal of the Horticultural Society* for 1847. *A History of the Species of Crocus* was reprinted from that journal just after his death. His greatest botanical work, *The Amaryllidaceae*, a book of 428 pages and 48 plates, was issued in 1837. He contributed *Crocorum Synopsis* to the *Botanical Register* miscellanea for 1843-45. Sweet commemorated his name in the genus *Herbertia* of the *Iridaceae*. He died in London on the 28th of May, 1847.

VOLUME LXVII.
OF
CURTIS'S
BOTANICAL MAGAZINE

IS DEDICATED TO

MRS. WRAY

OF OAKFIELD, CHELTENHAM

A LADY

WHO DERIVES SOME OF THE TRUEST PLEASURES FROM HER

EXTENSIVE AND SUCCESSFUL CULTIVATION OF

EXOTIC PLANTS

BY

THE AUTHOR.

ROYAL BOTANIC GARDENS, KEW,
JUNE 1, 1841.

[In spite of every effort it has been found impossible to trace a portrait of Mrs. Wray. If any reader knows of such a portrait, will he be good enough to write to The Secretary, Royal Horticultural Society, Vincent Square, Westminster, London? Should a suitable portrait be obtained, it will be reproduced and offered to possessors of this work to enable them to complete it.]

MRS. WRAY

(1775 ?-1864)

MARTHA READ was born about 1775. She may have been a native of Ebley, Gloucestershire, as she was living there at the time of her marriage, which took place in October, 1800. Her husband was Leonard Wray, of Upton House, Nutshalling, Hampshire, and she was his second wife. He was a descendant of Leonard Wray, brother of Sir Christopher Wray, who was Chief Justice of the Queen's Bench in the reign of Elizabeth.

In 1838 Mrs. Wray was living at Greville Villa, Grafton Road, Leckhampton, near Cheltenham. From there, in the following year, she moved to Oakfield, The Park, Cheltenham. She was back at Greville Villa again in 1856 and remained there until her death.

At Oakfield she cultivated a splendid collection of exotic plants, especially orchids. Several of these were first flowered in this country by Mrs. Wray, and one or two provided the material for figures in the *Botanical Magazine*. Two orchids worthy of mention in this connection are *Barkeria spectabilis*, a beautiful plant introduced from Guatemala in 1841, and *Oncidium Wrayae* from Mexico. Another fine orchid named in her honour is *Brassia Wrayae*. This also came from Guatemala, in 1840. Her name is commemorated, too, in *Hibiscus Wrayae*. That very beautiful orchid, *Laelia superba*, first flowered in England at Oakfield in 1844.

Mrs. Wray had a daughter, Mary, who lived for many years at Greville Villa and died there in 1862, aged sixty. She herself died at Greville Villa on the 18th of September, 1864, aged eighty-nine. Both were buried in the same vault in Leckhampton Parish Church.

Mrs. Wray corresponded with Sir William Hooker, at

MRS. WRAY (1775 ?-1864)

Kew, from 1840 to 1853, and sent him living specimens of rare plants. In expressing thanks to him for dedicating a volume of the *Botanical Magazine* to her, she wrote: 'I fear you have kindly over-rated my merits by the very gratifying inscription you have honoured me with in the volume for 1841 of your valuable Botanical Magazine. I feel it is far beyond the meed due to my feeble exertions in the cause of horticulture, but as far as enthusiasm goes I am not deficient.'



Courtesy of T. Hay, Esq.

MRS. LAWRENCE
OF EALING PARK, MIDDLESEX

TO WHOM VOLUME LXVIII.

IS DEDICATED

VAL BOTANIC GARDENS, KEW,
AUGUST, 1842.

W. J. HOOKER.

MRS. LAWRENCE

(1803 ?-1855)

LOUISA TREVOR SENIOR, younger daughter of James Trevor Senior, of Broughton House, Bierton, near Aylesbury, Buckinghamshire, was born about 1803. She married, in 1828, William Lawrence, the eminent surgeon, who was after her death created a baronet and who died in 1867.

Mrs. Lawrence lived at Drayton Green, Middlesex, where she had a beautifully designed estate, from early in the eighteen-thirties until about the year 1840, when her husband purchased Ealing Park. This consisted of extensive gardens and pleasure grounds, which afforded the necessary scope for the taste and energy of Mrs. Lawrence to make her famous as the greatest amateur plant cultivator of her time in England. She was the first to flower the beautiful *Amherstia nobilis* in this country, forestalling the Duke of Devonshire and his gardener, Mr. (afterwards Sir) Joseph Paxton, her keenest rivals in the successful cultivation of rare and beautiful plants. This occurred in 1849, two years after the introduction of the plant from India by Lord Hardinge, then Governor-General. This plant, or another of that species, was presented to Kew in 1854, and filled the centre of one of the glass-houses, where it flowered abundantly. Later it was moved to the Palm House, and there it soon 'withered and died.' In the early 'forties another interesting plant, a night-flowering cactus, opened its blossoms at Ealing Park. For this event Queen Victoria and the Prince Consort arrived on the scene at nine o'clock in the evening. Mrs. Lawrence also possessed an unrivalled collection of orchids, and was constantly exchanging rarities with other enthusiasts at home and abroad. A feature of her estate was a fine Deodar avenue.

Famous afternoon parties were held at Ealing Park in

MRS. LAWRENCE (1803 ?-1855)

Mrs. Lawrence's time. Queen Victoria and the Prince Consort, several Continental kings and queens, and the leading members of the English aristocracy were frequent visitors there. On one notable occasion Sir Robert Peel and all his ministers were received by Mrs. Lawrence at a fête given at the Park in their honour.

She died on the 14th of August, 1855, aged fifty-two. Sir Trevor Lawrence, whose biography is also contained in this book, was her son, and he carried on the family tradition of gardening. This tradition is worthily upheld to-day by Sir Trevor's son, Sir William, at Burford, near Dorking, Surrey.



Courtesy of Hon. Mrs. Willis.

MRS. SHERBOURNE
OF HURST HOUSE, PRESCOTT, LANCASHIRE

TO WHOM VOLUME LXIX.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
OCTOBER 1, 1843.

THE AUTHOR.

MRS. SHERBOURNE

(1791-1846)

MARGARET DOROTHEA WILLIS, eldest daughter of Richard Willis, of Halsnead, Prescott, Lancashire, was born on the 3rd of October, 1791, one of a family of fifteen.

She was married on the 1st of May, 1821, to Charles Robert Sherbourne, of Hurst House, Prescott. He was then about sixty-five years of age and she not quite thirty. He died on the 31st of January, 1836, aged eighty.

From 1842 until the year of her death Mrs. Sherbourne was a correspondent of Sir William Hooker, the recently appointed Director of Kew. She sent him living plants and received others from Kew in exchange. During those years, and probably for some time before, she was a very enthusiastic amateur gardener. Among the rare plants which Mrs. Sherbourne sent to enrich the Kew collection was *Gardenia Sherbourniae*, a member of the *Rubiaceae* from Sierra Leone. G. Don gave this plant generic rank under the name of *Sherbournia foliosa*. It was first flowered in England, in June 1843, by Mrs. Sherbourne, and was figured in the *Botanical Magazine*.

Mrs. Sherbourne was most interested in tropical plants which produce edible fruits, and in the early eighteen-forties had amassed an amazingly large collection of these at Hurst House. She possessed some very fine specimens of the Rose Apple, *Eugenia jambos*, and the Malay Apple, *Eugenia malaccensis*. She had also some good plants of the Papaw, *Carica Papaya*, flowering and fruiting abundantly; a fine Sour Sop, *Anona muricata*, and some specimens of the Sweet Sop or Custard Apple, *Anona squamosa*. A list of the others represented there would include the Avocado, *Persea gratissima*; Star Apple, *Chrysophyllum Cainito*; Honey Berry, *Melicocca bijuga*; Mammee Tree, *Mammea americana*;

MRS. SHERBOURNE (1791-1846)

Anchovy Pear, *Grias cauliflora*; Jackfruit, *Artocarpus integrifolia*; Cashew Nut, *Anacardium occidentale*; Butter Nut, *Caryocar nuciferum*; Mango, *Mangifera indica*; Sapodilla, *Achras Sapota*; and the Litchi, *Litchi chinensis*.

In a letter to Sir William Hooker, thanking him for dedicating a volume of the *Botanical Magazine* to her, Mrs. Sherbourne says: 'I fear that neither my zeal, nor my knowledge of the science of Botany, entitle me to the distinction which has been so kindly bestowed, but I may add with truth that my delight in garden pleasures has been greatly increased by many most agreeable hours spent in studying the *Botanical Magazine*.' Her death occurred at Hurst House on the 6th of November, 1846.



Courtesy of the late Herr Alwin Berger.

HIS HIGHNESS
THE PRINCE DE SALM DYCK
OF DYCK

TO WHOM VOLUME LXX.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1844.

W. J. HOOKER.

PRINCE DE SALM-DYCK

(1773-1861)

JOSEPH MARIA FRANZ ANTON HUBERT IGNAZ ZU SALM-REIFFERSCHIED-DYCK was born at Castle Dyck, near Düsseldorf, on the 1st of September, 1773. He had a private tutor up to the age of ten, when he was sent to the Jesuit College in Cologne. Later, to complete his education, he went to Vienna, Brussels, and Paris.

His marriage at the age of eighteen to Countess Marie von Hatzfeld proved an unhappy one, and the two separated in 1801. Two years later he married again. His second wife was a successful writer of musical plays. He himself devoted his leisure to scientific pursuits, and his house became the rendezvous of the learned world of Paris.

Owing to the French Revolution he lost his sovereignty and title of Count, but, as he did not take an active part in the war against the French, he retained his possessions. Generals Kléber and Bernadotte made Castle Dyck their headquarters, a point in favour of the owner, who thus gained two powerful friends.

Frequent visits to Paris during the French occupation of the Rhine Province brought him into contact with the leading botanists of the French capital. He became acquainted with the two Jussieus, Thouin, and the celebrated author of the *Flora of Paris*, Thuillier. His friendship for Redouté, the painter, who illustrated de Candolle's *Plantarum Succulentarum Historia*, led Salm-Dyck to devote himself thenceforward to the study of succulent plants. He took lessons in drawing and painting from his friend, and began to develop a living collection of succulents at Dyck which was to become the most complete in Europe. His collection became so famed that botanists, among whom were Haworth, Willdenow, J. F. v. Jacquin, Robert Brown, Link, Bischoff,

PRINCE DE SALM-DYCK (1773-1861)

Pfeiffer, and the two de Candolles, became his guests at Castle Dyck so that they might study these plants in the living state. The winters of the first twenty years of the nineteenth century were spent by Salm-Dyck in Paris, but every spring he returned to his plants.

In 1817 he published, in German and French, critical descriptions of the species and varieties of *Aloe* already described by de Candolle, Haworth, Jacquin, Willdenow, and others, in addition to many hitherto undescribed which had been found in cultivation in European gardens. His classical *Hortus Dyckensis* appeared in 1834; and his comprehensive monographic work on *Aloe* and *Mesembrianthemum*, illustrated with nearly four hundred plates, was published in parts between 1836 and 1863. *Cactae in Horto Dyckensi cultae anno 1841* was followed by issues for 1844 and 1849. This is but a selection of Salm-Dyck's botanical publications.

He had a distinguished career in the Landwehr Regiment, and King Frederick William III. made him a prince in 1816. In 1819 he was elected to the Leopoldino-Caroline Academy of Naturalists under the name Zeuxis, indicating skill in painting. He is commemorated in *Dyckia*, a genus of *Bromeliaceae*. His death took place at Nice on the 21st of March, 1861.



British Museum.

THE RIGHT HONOURABLE
THE EARL OF LINCOLN

CHIEF COMMISSIONER OF HER MAJESTY'S WOODS AND FORESTS

TO WHOM VOLUME LXXI.

IS DEDICATED

ROYAL GARDENS, KEW.
DECEMBER 1, 1845.

W. J. HOOKER.

EARL OF LINCOLN

(1811-1864)

HENRY PELHAM FIENNES PELHAM-CLINTON, fifth Duke of Newcastle-under-Lyme, was born at Berkeley Square, London, on the 22nd of May, 1811. He entered Eton as Earl of Lincoln in 1826, and proceeded to Christ Church, Oxford, where he took his B.A. in 1832 and was made a D.C.L. in 1863. In 1832 he married a daughter of the tenth Duke of Hamilton and Brandon.

He sat in the House of Commons as one of the members for South Nottinghamshire from 1832 to 1846, and was Lord of the Treasury in Sir Robert Peel's government for a few months in the early part of 1835. In 1841, on Peel's return to power, Lord Lincoln was appointed First Commissioner of Woods and Forests, a post which he held for nearly five years. His opinions, like Peel's, changed considerably, and his constituents rejected him at an election in February, 1846. Falkirk Burghs, however, voted him back to Parliament in May of the same year. On the death of his father, in 1851, he went to the Lords.

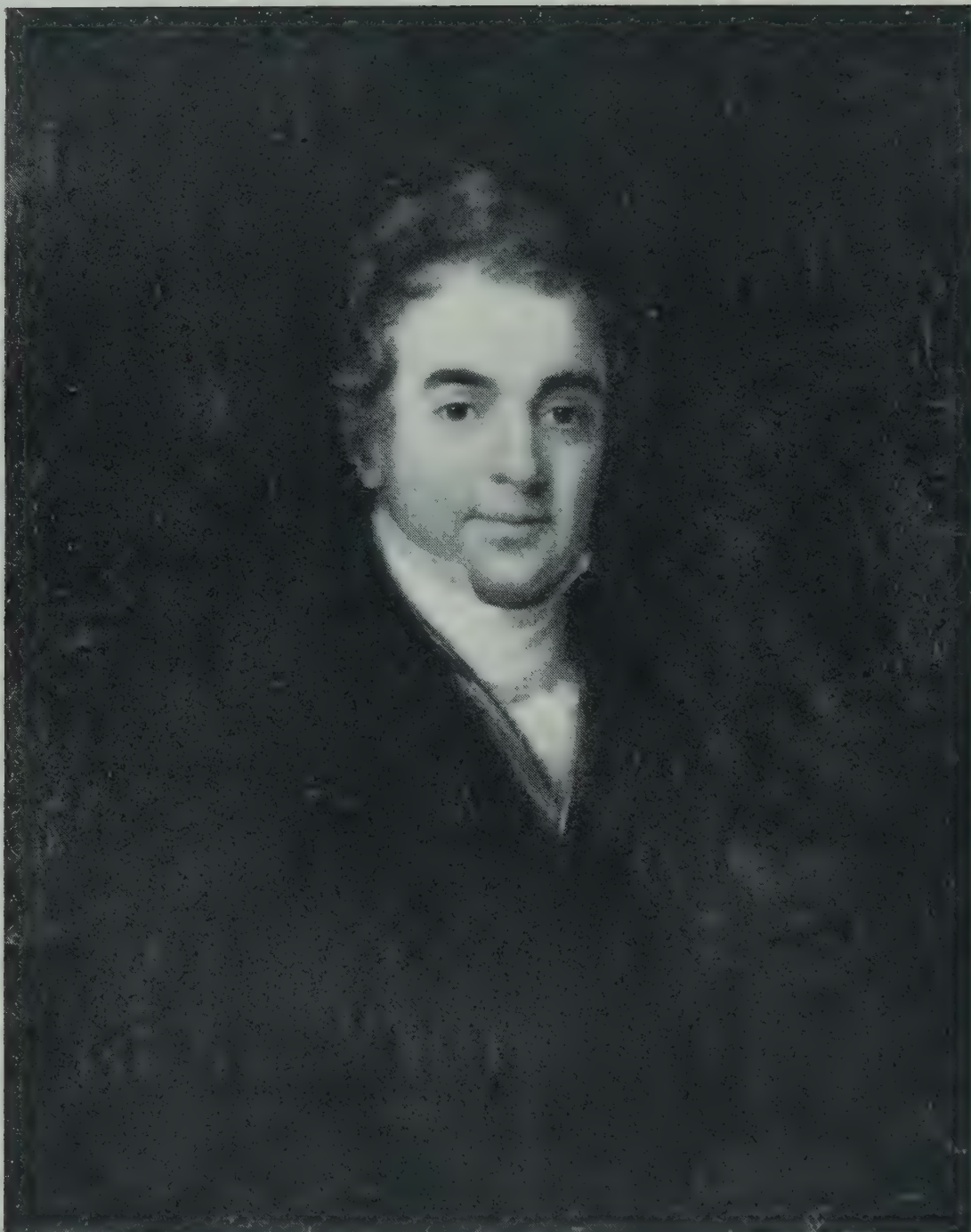
In Lord Aberdeen's ministry, formed in December, 1852, the Duke received the seals of the Colonial Office, but in 1854, after the commencement of the Crimean War, he went to the War Office. He was blamed, unjustly as was afterwards acknowledged, for blunders consequent on the failure of the old system to work efficiently after thirty years of peace. In 1855 he resigned and paid a visit to the war area. Four years later he was reappointed Secretary of State for the Colonies, a post he held until illness caused his resignation in the spring of 1864. He went with the Prince of Wales to Canada and the United States in 1860.

It was fortunate for Kew and its new Director, Sir William Hooker, that his appointment almost coincided with

EARL OF LINCOLN (1811-1864)

that of Lord Lincoln as Chief Commissioner of Woods and Forests in place of Lord Duncannon, who had no interest in Kew's revival. Hooker received much encouragement and was allowed complete freedom of action by Lincoln, who was a sympathetic patron of natural science. He is commemorated in *Newcastlia*, an Australian genus of *Verbenaceae*, so named by the great Mueller 'to evince my gratitude to the exertions of His Grace the Duke of Newcastle in behalf of the North Australian Expedition.'

The Duke became Lord-Lieutenant of Nottinghamshire in 1857, and was made Knight of the Garter in 1860. He died on the 18th of October, 1864.



Courtesy of B. Holt, Esq.

TO THE MEMORY OF
THE REV. JOHN CLOWES

LATE OF BROUGHTON HALL, MANCHESTER

VOLUME LXXII.

IS INSCRIBED

ROYAL GARDENS, KEW,
DECEMBER 1, 1846.

THE AUTHOR.

REV. JOHN CLOWES

(1777-1846)

JOHN CLOWES, second son and eventually heir of Samuel Clowes of Broughton Hall, near Manchester, who was Sheriff of Lancashire in 1777, was born on the 1st of May in the year of his father's shrievalty. He was educated at Winwick Grammar School and at Trinity College, Cambridge, where he proceeded B.A. in 1799 and M.A. in 1805. From an early age he was intended for the Church, and was elected Fellow of the Collegiate Church, Manchester, in 1809.

In his day ritualism was not in great favour, and he himself was of an independent turn of mind. He would read the Gospel for the day from the altar and conclude with these words: 'Here endeth the Holy Gospel.' The Chaplain, having a habit of thinking aloud, would growl audibly: 'No! the Holy Gospel never ends,' and then go on to the Nicene Creed, which he considered to be a continuation of the Gospel.

Clowes's eldest brother died in 1811, and he resigned his fellowship and succeeded to the family estates. These included Broughton Hall and nearly the whole of the town of Broughton-with-Kersal. This valuable property had been acquired by the family through the marriage of Samuel Clowes, an ancestor of John, with Mary Chetham, daughter and co-heiress of a great-nephew of Sir Humphrey Chetham. Sir Humphrey was the founder, in 1653, of the hospital and library at Manchester which bear his name.

Though resigning from official connection with the Church, Clowes retained a great interest in the parish and the diocese, and he gave much financial assistance to benevolent institutions there. He was appointed a Feoffee of Manchester Grammar School in the year he left the

REV. JOHN CLOWES (1777-1846)

Collegiate Church, and he was Governor of Bury Grammar School from 1821 to 1833.

Clowes had an accurate and extensive knowledge of the Greek classics. He was in the habit of reading through both the *Iliad* and *Odyssey* every year in the original Greek.

As a young man he is said to have been 'of unimpeachable conduct ; of sober piety ; shy and cold in his manner, and not susceptible to the charms of feminine beauty.' But a later Lancashire historian declares : ' I once saw Mr. Clowes and remember his empurpled complexion, and I thought he had the bearing of an old ecclesiastic, who had been long acquainted with all the luxuries and refinements of opulence, unaccustomed to parish work, and knowing little of self-denial.'

During the last ten or twelve years of his life Clowes occupied himself chiefly with botanical and horticultural pursuits. He possessed one of the finest private collections of orchids in the kingdom, procuring the rarest kinds at very considerable expense. After his death these orchids went to Kew, and the collection was such a rich one, especially in Andean species, that a new house had to be built to accommodate it.

A Catalogue of Orchidaceous Plants in the Collection of the Rev. John Clowes, compiled by his gardener, William Hammond, was published in 1842. Two of the orchids which Clowes was the first to flower in this country were named in his honour *Clowesia rosea* and *Anguloa Clowesii*. Another orchid which commemorates his name is *Miltonia Clowesii*.

John Clowes died at Broughton Hall on the 28th of September, 1846.



Courtesy of Miss Amy Watson.

CAPTAIN SIR EVERARD HOME, BART., R.N.

TO WHOM VOLUME LXXIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1847.

THE AUTHOR.

CAPTAIN SIR EVERARD HOME, BART.

(1798-1853)

JAMES EVERARD HOME was born on the 25th of October, 1798. He was the elder son of Sir Everard Home, the first Baronet, who was a Vice-President of the Royal Society and Sergeant-Surgeon to George III.

Home entered the Navy on the 10th of April, 1810, and after serving on various foreign stations was given command of the *Racehorse*, a ship of eighteen guns, in the West Indies. On his father's death, in 1832, he succeeded to the baronetcy.

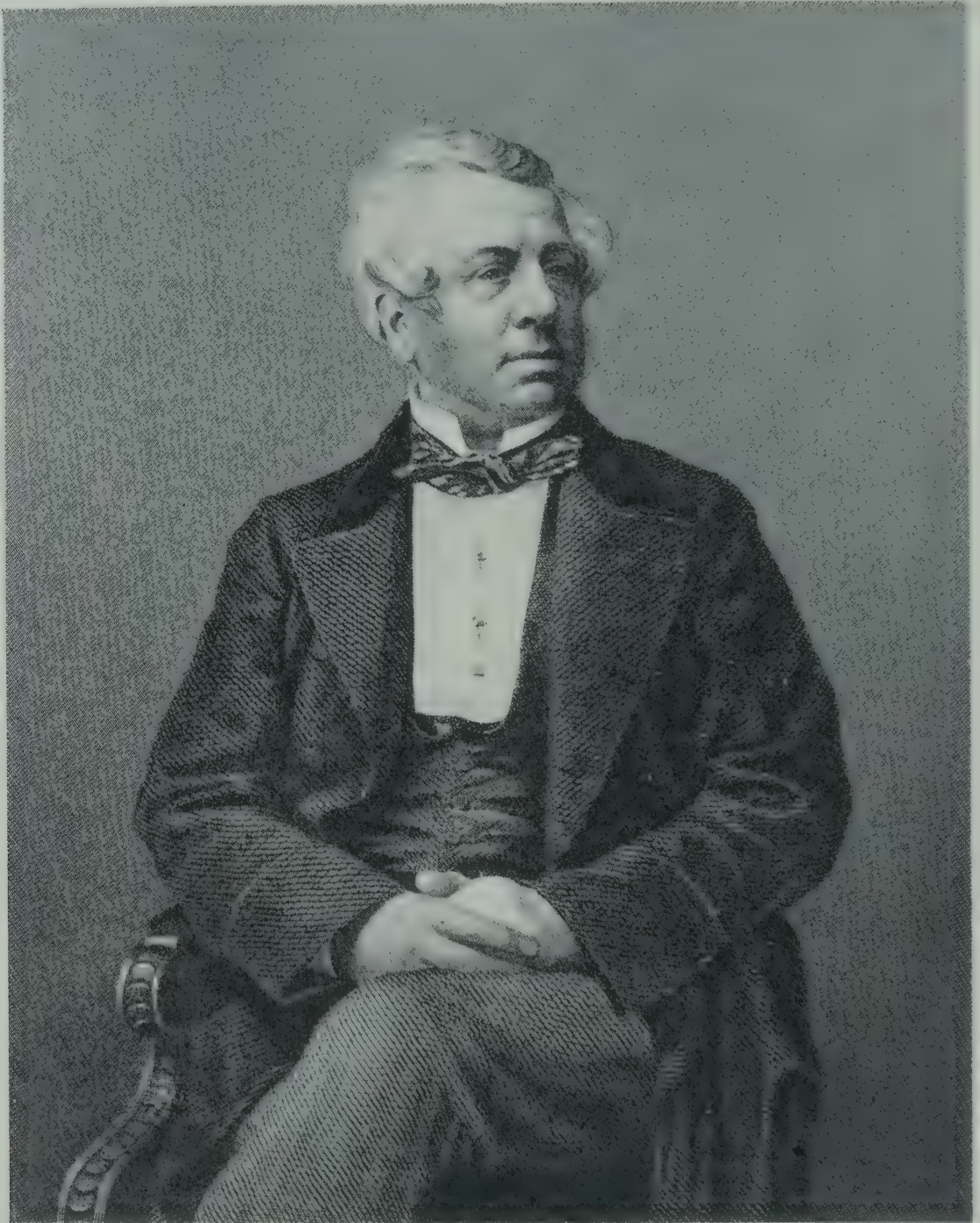
In 1835, in company with a Brazilian squadron, he took an active part in the siege of Pará, and about two years later was promoted to the rank of captain. He was appointed to another ship, the *North Star*, in 1841, and employed on the East Indian Station. During this period he was engaged in the Chinese War, contributing to the capture of Woosung and Shanghai, and participating in the operations on the Yang-tse-Kiang, for which service he was nominated a C.B. on the 24th of December, 1842. In December, 1845, when senior naval officer at New Zealand, he originated plans which were adopted by Captain Charles Graham, during whose siege of the stronghold of Kawiti he was entrusted with the defence of a base situated at the point of debarkation. He was appointed on the 28th of November, 1850, to the command of the *Calliope*, a ship of twenty-six guns, which arrived at Sydney a few days before his death from the effects of paralysis, with which he was seized while the vessel was off the coast of New Zealand. He died on the 2nd of November, 1853, unmarried.

Home corresponded with Sir William Hooker and Robert Brown, and collected plants which he brought home whenever his duties allowed. Some of his letters record observations on the condition of the Norfolk Island pines, and an

CAPTAIN SIR EVERARD HOME (1798-1853)

extract from one of them was published in the *Proceedings of the Linnean Society* for 1847. In his opinion, as expressed in his letters, flowers and fruits in New Zealand had not so sweet a perfume or so rich a flavour as the same varieties had in England—‘ nor have the bees the same venom in their sting.’ And again : ‘ Scotch kale is never good, for want of frost to sweeten it.’ In another communication he records that ‘ hops, etc., turn the same way in the southern as in the northern hemisphere.’ He suggested to Hooker that officers of ships about to sail to foreign countries should be instructed to make collections of plants.

One of the earliest of his few published papers was an *Account of a Luminous Animalcule*, contributed to the *Quarterly Journal of Science* in 1828. He also published, in an astronomical journal, observations made at the solar eclipse of July, 1842, while he was stationed on the coast of China near Shanghai. The Royal Society elected him a Fellow in 1825.



British Museum.

THE RIGHT HONOURABLE
THE EARL OF CARLISLE

CHIEF COMMISSIONER OF HER MAJESTY'S WOODS AND FORESTS

TO WHOM VOLUME LXXIV.

IS DEDICATED

THE AUTHOR.

EARL OF CARLISLE

(1802-1864)

GEORGE WILLIAM FREDERICK HOWARD, seventh Earl of Carlisle, eldest son of George Howard, sixth Earl, and Lady Georgiana Dorothy Cavendish, eldest daughter of the fifth Duke of Devonshire, was born at Berkeley Square, London, on the 18th of April, 1802. He was educated at Eton and Christ Church, Oxford, where, in 1821, he took prizes for Latin and English verse. He graduated B.A. in 1823 and obtained his M.A. in 1827. When his father, in 1825, succeeded to the earldom, he himself became Lord Morpeth.

While at St. Petersburg, in 1826, with his uncle, the sixth Duke of Devonshire, on the mission to attend the coronation of the Emperor Nicholas, he was elected as M.P. for his father's old seat, the borough of Morpeth. In his maiden speech, in 1827, he seconded a resolution for the relief of the Roman Catholic disabilities and, three years later, gave his support to a similar proposal on behalf of the Jews. He was returned for Yorkshire in the 1830 General Election, and spoke in favour of the Reform Bill of 1831, which he described as 'a safe, wise, honest, and glorious measure.' From the General Election of 1831 he represented first Yorkshire and later the West Riding for ten years. He was Chief Secretary for Ireland for more than six years from the formation of Lord Melbourne's second ministry in 1835. The Irish Tithe Bill and other measures were carried by him, which showed him to be a man of considerable ability. The West Riding rejected him in 1841, but returned him unopposed in 1846. In that year Morpeth was given a seat in Lord John Russell's Cabinet and appointed Chief Commissioner of Woods and Forests. He was again returned to the Commons for the West Riding division in 1847, with

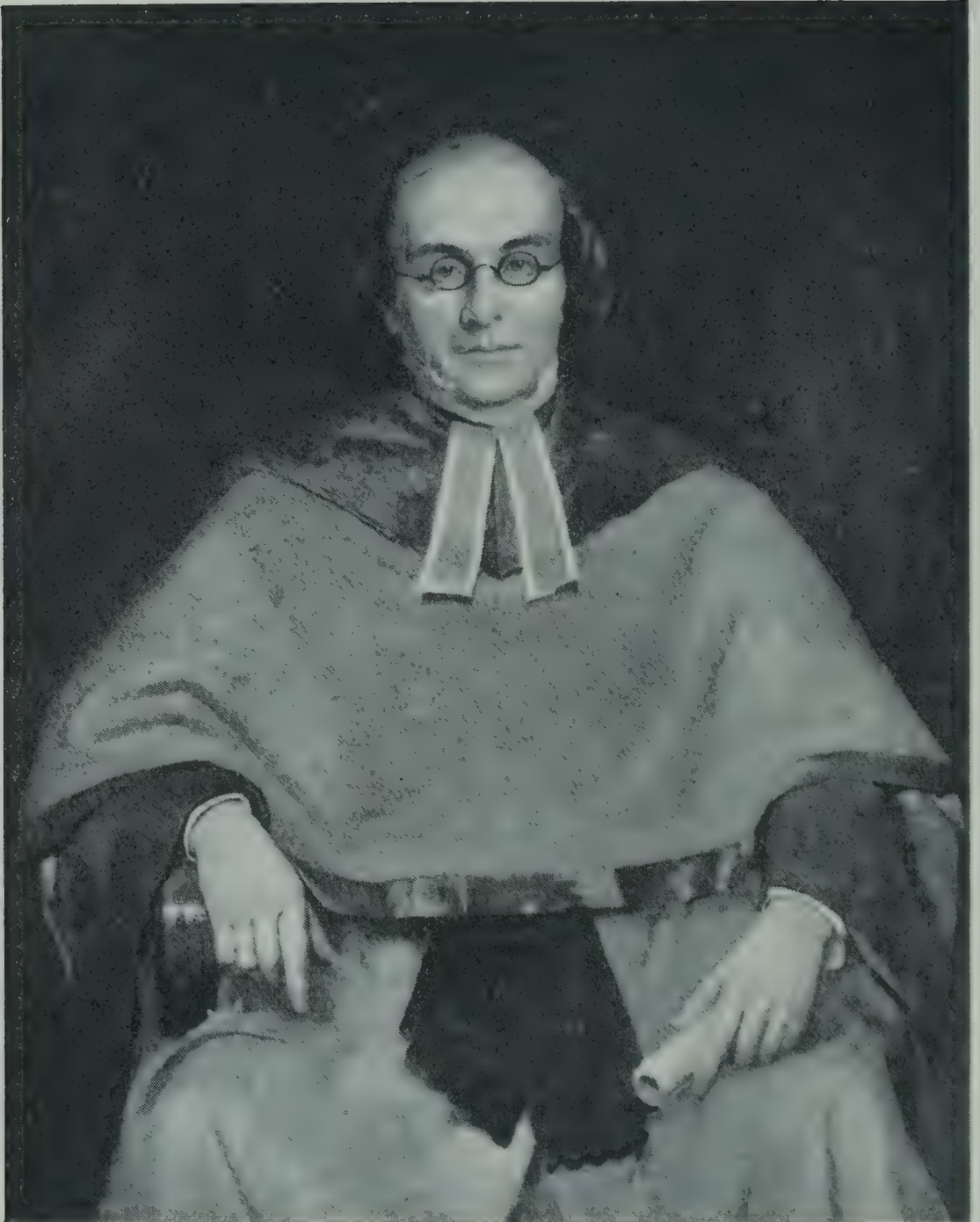
EARL OF CARLISLE (1802-1864)

Richard Cobden as colleague. In October, 1848, he succeeded his father as seventh Earl of Carlisle.

As Chief Commissioner of Woods and Forests he had Kew Gardens under his jurisdiction, and his relations with Sir William Hooker were of a most happy nature. Any suggested improvement in the Gardens had his support, as had also the cause of natural science in general. In a letter to Sir William, dated the 21st of October, 1847, he speaks of the 'satisfaction I feel at the Treasury sanctioning an advance of £400 for two years to facilitate Dr. Hooker's expedition.' This was Dr. (afterwards Sir) J. D. Hooker's fruitful journey to the Himalayas.

Besides being a contributor of prose and verse to the journals of the time, Carlisle was the author of several larger published works. These included *The Last of the Greeks; or the Fall of Constantinople, a Tragedy*, 1828; and *The Second Vision of Daniel; a Paraphrase in Verse*, 1858. His *Lectures and Addresses in Aid of Popular Education*, etc., form the twenty-fifth volume of the *Travellers' Library*, 1856. He wrote a preface to an English edition of *Uncle Tom's Cabin*. His speeches in the Commons on sanitary reform and public health were also published.

Carlisle was invested with the Order of the Garter in 1855. He held the office of Lord-Lieutenant of Ireland, except for a break of sixteen months, from February, 1855, till ill-health compelled his retirement in October, 1864. His death occurred at Castle Howard, Yorkshire, on the 5th of December, 1864. He never married. His nature was gentle and kind, and he possessed great fluency of speech.



Middle Temple.

SIR LAURENCE PEEL, K.B.

CHIEF JUSTICE OF THE SUPREME COURT OF CALCUTTA

TO WHOM VOLUME LXXV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1849.

W. J. HOOKER.

SIR LAURENCE PEEL

(1799-1884)

LAURENCE PEEL, son of Joseph Peel of Bowes Farm, Middlesex, and first cousin to the famous statesman, Sir Robert Peel, was born on the 10th of August, 1799. He went to Rugby in 1812, and graduated B.A. at St. John's College, Cambridge, in 1821, proceeding M.A. in 1824. In the year last mentioned he was called to the Bar of the Middle Temple.

From 1840 until 1842 he was Advocate-General in Calcutta, and he was then promoted to the Chief Justiceship of the Supreme Court and a knighthood bestowed on him. During 1854 and 1855 he was Vice-President of the Legislative Council, Calcutta. The whole of his salary, £8,000 a year, he gave to charity. He was very popular in India, and a statue of him was erected in Calcutta on his retirement and departure from the country in 1855.

Peel's gardens in Calcutta were very fine indeed. He did much to promote a taste for horticultural pursuits in India by imparting to others some of his considerable knowledge and skill in the laying out of gardens and by generous financial aid. He was President of the Agricultural and Horticultural Society of India from 1848 to 1854. On his resignation from that office, due to his leaving India, a farewell letter was sent him by the council of the Society expressing regret at his leaving them, and testifying to their good fortune in having 'possessed the services of a President whose distinguished philanthropy will long preserve his name and character, not only among the Members of this Institution, but in the grateful recollection of the inhabitants of Calcutta.' The letter records also Peel's services to horticulture by the 'constant importation of new and valuable plants which have been propagated and freely distributed.'

SIR LAURENCE PEEL (1799-1884)

After his return to England, in 1855, Sir Laurence became Indian Assessor to the Judicial Committee of the Privy Council. He was appointed a director of the East India Company in 1857. In 1864 he became President of Guy's Hospital, and two years later Treasurer of the Middle Temple.

He was the author of *Horae Nauseae*, poems published in 1841. His *Sketch of the Life and Character of Sir Robert Peel* appeared in 1860.

At the University of Oxford an honorary degree of D.C.L. was conferred on him in 1858, and he was a D.L. of the City of London. He died at Ventnor, Isle of Wight, on the 22nd of July, 1884.



Royal Botanic Gardens, Kew.

DR. JOHN TORREY

THE DISTINGUISHED AUTHOR

TO WHOM VOLUME LXXVI.

IS INSCRIBED

ROYAL GARDENS, KEW,
DECEMBER 1, 1850.

THE AUTHOR.

DR. JOHN TORREY

(1796-1873)

JOHN TORREY was born in New York on the 15th of August, 1796. He attended public schools in that city and was sent for a year to a school at Boston. At an early age he came under the notice of Amos Eaton, a pioneer American naturalist, who taught him the rudiments of botany and awakened in him an enthusiasm for natural science which lasted as long as life. Torrey began to study medicine in 1815 and took his degree in 1818. Afterwards he practised his profession in New York City, but there were more young scientists than patients among his visitors. In 1824 he was appointed Professor of Chemistry, Mineralogy, and Geology in the United States Military Academy at West Point. Three years later he exchanged this Chair for that of Chemistry and Botany in the College of Physicians and Surgeons, New York.

While yet a medical student, in 1817, he presented to the New York Lyceum of Natural History, of which he was one of the founders, his *Catalogue of Plants growing spontaneously within Thirty Miles of the City of New York*. This was published two years later. One volume of his *Flora of the Northern and Middle Sections of the United States*, a fine work of the time, appeared in 1824. The *Flora* was to have been completed by the issue of another volume, but this did not materialise. Instead, a *Compendium*, or pocket volume for the field, was published in 1826. In 1836 he published an elaborate *Monograph of North American Cyperaceae*, containing, besides a full account of the other genera, a complete revision of the genus *Carex*. Dr. E. P. James, botanist of an expedition to the Rocky Mountains in 1820, placed his collections in Dr. Torrey's hands, and in 1828 the results were published. This work is of interest as being the first

DR. JOHN TORREY (1796-1873)

botanical publication of importance in America in which the plants were arranged according to the Natural System. Torrey was appointed botanist to a geological survey of New York in 1836. The result was a *Flora of the State of New York*, issued in 1843 in two large quarto volumes with 161 plates. He invited Asa Gray to collaborate with him in the preparation of a *Flora of North America*. This important though incomplete work was published in two volumes in 1838-43. The *Flora* was suspended because of a rapidly increasing number of new discoveries, and time was spent in studying and describing these. Torrey continued to take a prominent part in the work on the American flora, in the intervals of professorial duties, almost to the end of his life.

Dr. Torrey belonged to many of the scientific societies of Europe. He was a member of the National and of the American Academies of Sciences. Twice, for long periods, he was President of the New York Lyceum of Natural History, in those days one of the foremost American scientific societies. He is commemorated in *Torreya*, an evergreen conifer of the Southern States, and in an American botanical periodical of the same name which was founded in 1901. He died in New York on the 10th of March, 1873.



Royal Botanic Gardens, Kew.

DR. ASA GRAY

PROFESSOR OF BOTANY IN THE UNIVERSITY OF NEW CAMBRIDGE, MASSACHUSETTS

TO WHOM VOLUME LXXVII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1851.

THE AUTHOR.

DR. ASA GRAY

(1810-1888)

ASA GRAY was born on the 8th of November, 1810, in Paris, New York. While still very young he helped with his father's farm and tannery. After receiving private tuition young Gray was educated at the Grammar School of Clinton, New York, and at Fairfield Academy. He entered the Medical School of the Academy in 1825. In the winter of 1827-28 a paper on botany in the *Edinburgh Encyclopaedia* so fired his interest that he bought a copy of Eaton's *Botany* and 'longed for spring.' He took his M.D. at Fairfield in 1831, but abandoned medicine, and in the autumn of that year became a science instructor in the High School of Utica, New York. While at Utica he gave his first lectures on botany, using the fees for the expenses of a botanical excursion through western New York to Niagara Falls. For a year he assisted Professor Torrey in the Chemical Laboratory of the Medical School, New York, and during this time the two formed a life-long friendship.

Gray became Curator and Librarian of the New York Lyceum of Natural History in 1835. Here he prepared his *Elements of Botany*, hailed as the finest text-book in the language. He was appointed Botanist to the Wilkes Exploring Expedition in 1836, but on account of a long delay in sailing and threatened changes in the management of the Expedition, and also because of his work on the North American flora, he resigned in the following year. He devoted his whole energies, with Torrey, to the production of their *Flora of North America*, of which he was, indeed, almost sole author. This work in two volumes was issued in 1838-43. For this task Gray's examination of American types in foreign herbaria was necessary, and in November, 1838, he began a journey which cleared up much confusion

DR. ASA GRAY (1810-1888)

with regard to previously described American plants, and also brought him into touch with other great botanists.

He returned to America a year later, and in 1842 was appointed Fisher Professor of Natural History at Harvard College. This included the Directorship of the Botanic Garden, a post which he relinquished to Professor C. S. Sargent in 1873. He retained his title as Professor and Director of the Herbarium until his death. In spite of continuous labour on the flora of North America, he devoted much energy to creating and building up an herbarium and botanical library at Harvard.

Among many other of Gray's published works is the *Manual of the Botany of the Northern United States*, which went to several editions. On the botany of the Wilkes Expedition he prepared a finely illustrated work. He also produced two volumes of the *Genera Florae Americae Boreali-Orientalis Illustrata*, 1848-49.

Although Gray's ideas on the evolution of species differed considerably from Darwin's, and in spite of the fact that he came of staunch Presbyterian stock and was in early life antagonistic, he had the courage radically to change his views at a time when a belief in evolution was identified with atheism. His principal essays on the subject were collected into a volume entitled *Darwiniana*.

Gray was an honorary member of all the principal scientific academies in Europe. He was elected Foreign Member of the Linnean Society in 1850 and of the Royal Society in 1873. He was also LL.D. of Oxford and Edinburgh, and Sc.D. of Cambridge. In his own country he held the office of President of the American Academy of Arts and Sciences from 1863 to 1873, and he was one of the Regents of the Smithsonian Institution. His death took place at Cambridge, Massachusetts, on the 30th of January, 1888. Two genera of plants were named *Grayia* in his honour, and Lindley commemorated him in the genus *Asagraea*.



Royal Botanic Gardens, Kew

N. B. WARD, ESQ., F.R.S., L.S.

TO WHOM VOLUME LXXVIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1852.

THE AUTHOR.

NATHANIEL BAGSHAW WARD

(1791-1868)

NATHANIEL BAGSHAW WARD was born in London in 1791. He was educated for the medical profession and, like his father before him, practised for many years in the east end of London.

At a very early age he was attracted to the study of natural history. This was fostered by a voyage to Jamaica when he was thirteen years old. Much of his time there was spent in rowing out to the edge of the coral reef to admire the beauty of the animal and vegetable life beneath the water. The tropical vegetation of the island had an even greater fascination for him, and caused him to become an ardent botanist. This love for plants was maintained through his medical studies, and he was often out at sunrise collecting plants around London, a habit which stuck to him throughout life. His herbarium eventually contained 25,000 specimens.

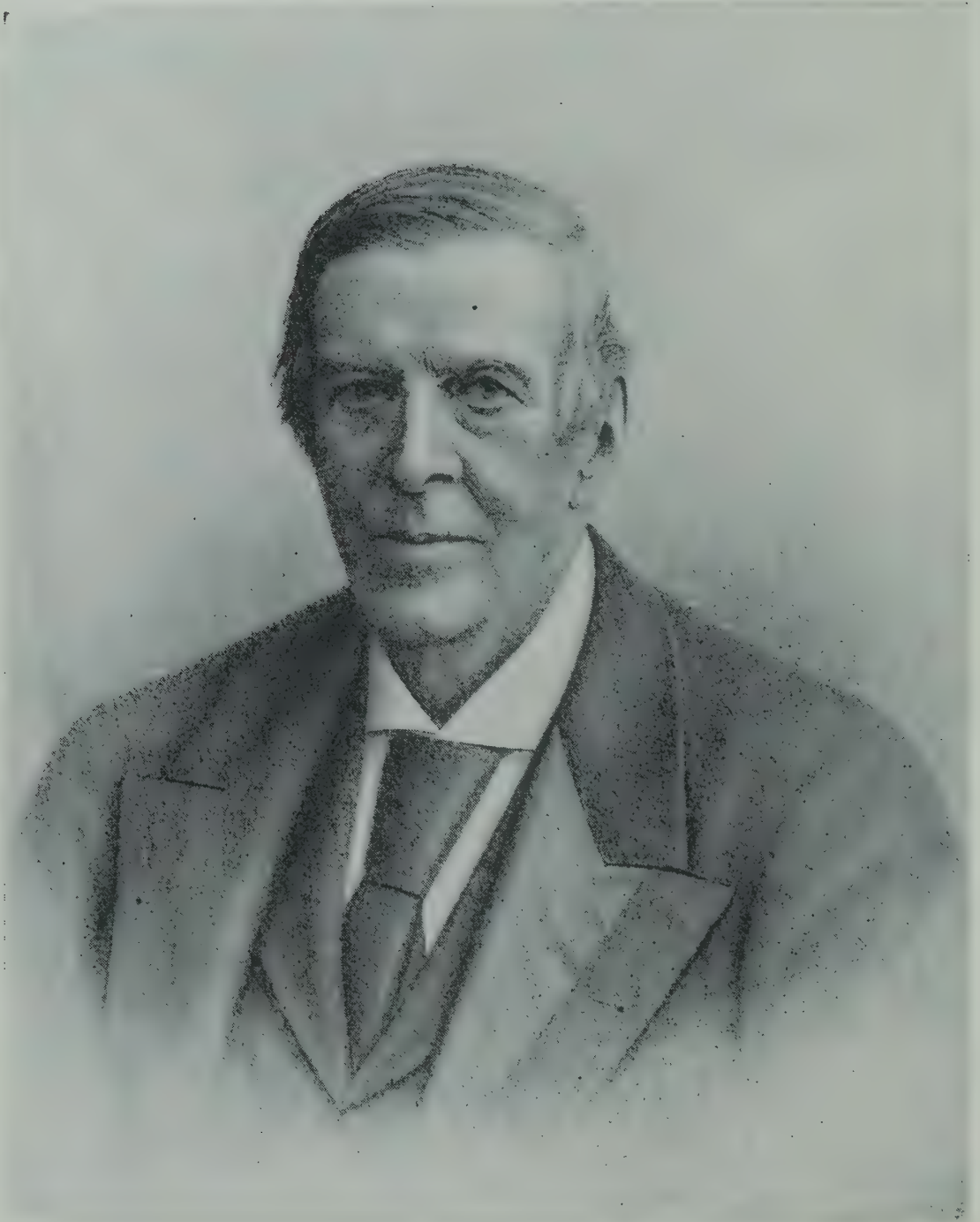
Ward was the inventor of the case which bears his name, and which has proved so useful for the transport of living plants from one part of the world to another, protecting them from salt spray, rough winds, and extremes of heat and cold. Among the important plants successfully transported by means of the Wardian case were the Chinese banana, *Musa Cavendishii*, from the Duke of Devonshire's seat at Chatsworth to the Samoan Islands, and thence, in 1840, to the Friendly Islands and Fiji; and twenty thousand tea plants by Robert Fortune from Shanghai to the Himalayas. Through its agency also cinchona plants were transported from South America through Kew to be established in India, and the Pará rubber tree was introduced from its home in Brazil to Ceylon and Malaya, also through Kew. The idea which led to the invention came to Ward in the summer of

NATHANIEL BAGSHAW WARD (1791-1868)

1829, through the appearance and healthy development of a fern and a grass on some mould containing the pupa of a moth which he had placed in a covered glass bottle. Ward's letter to Dr. W. J. Hooker, announcing the discovery, was published in the *Companion to the Botanical Magazine* in 1836. Faraday lectured on the subject to the Royal Institution in 1838. Ward himself, in 1842, published a work entitled *On the Growth of Plants in Closely Glazed Cases*, an illustrated second edition of which appeared ten years later.

For some years he had charge of the Apothecaries' Garden at Chelsea, which he greatly improved. He was Examiner in Botany to the Apothecaries' Society from 1836 to 1854, and eventually became Master and Treasurer. He gave frequent microscopical soirées, out of which arose the Microscopical Society in 1839.

Ward was elected a Fellow of the Linnean Society in 1817 and of the Royal Society in 1852. He was a member of the Botanical Society of Edinburgh from its foundation in 1836. His friends Harvey and Hooker commemorated him in *Wardia*, a genus of South African mosses. He died at St. Leonard's, Sussex, on the 4th of June, 1868.



Royal Botanic Gardens, Kew.

HIS EXCELLENCY
SIR HENRY BARKLY, K.H.

TO WHOM VOLUME LXXIX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1853.

W. J. HOOKER.

SIR HENRY BARKLY

(1815-1898)

HENRY BARKLY was born in London on the 24th of February, 1815, the son of a West India merchant. He was educated at Bruce Castle School, Tottenham, with a view to fitting him for a commercial career. On the death of his father the family were left in a financially poor position, and young Barkly went to Demerara to try to put their property into a more prosperous condition. He made a journey through British and Dutch Guiana, in the footsteps of Sir R. Schomburgk, gaining the useful knowledge of colonial resources which fostered his love for science and laid the foundation of his career as a public servant.

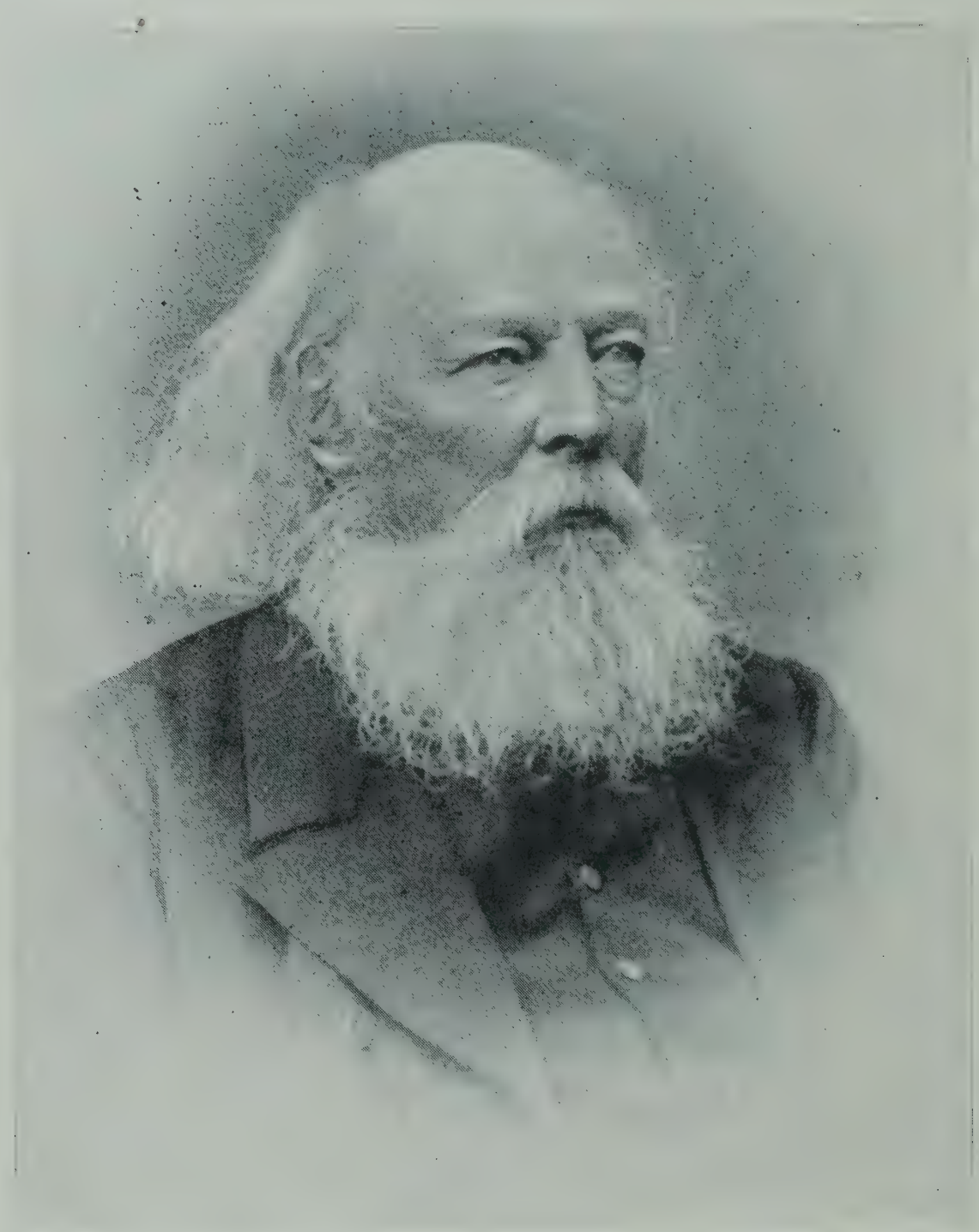
Returning to England he was elected, in 1845, to the House of Commons as Liberal-Conservative member for Leominster. He supported Sir R. Peel's Free Trade policy, and his able speeches on the important sugar question led to his being appointed by Earl Grey, in 1848, Governor and Commander-in-Chief of British Guiana. He was created a K.C.B. in 1853 and promoted to the Governorship of Jamaica, a post which he filled with success until 1856. Between then and 1871 he was successively appointed Governor of Victoria, Mauritius, and the Cape of Good Hope, to which last was added the post of High Commissioner for settling the affairs of the eastern frontier of the South African colony. In South Africa he distinguished himself, and was rewarded with the G.C.M.G. in 1874.

Barkly despatched living plants from British Guiana to Kew in 1852. In 1858 Sir F. von Mueller, whom Barkly had appointed Government Botanist of Victoria, dedicated to him a handsome monotypic genus of *Sophoriae*, *Barklya syringifolia*. In South Africa, his last official home, he became interested in succulents, particularly the *Stapelieae*.

SIR HENRY BARKLY (1815-1898)

Many of these he cultivated, his wife and daughter making water-colour drawings of them as they flowered. Copies of these with descriptive notes were sent to Kew and published in *Hooker's Icones Plantarum*, plates 1901-1925. Living plants of this tribe were also sent, and some which flowered were figured in the *Botanical Magazine*. It was largely owing to Barkly's efforts that the governments of Cape Colony and Natal gave their aid in the production of the *Flora Capensis*.

In 1877 Sir Henry Barkly returned to England and retired. The Royal Society elected him a Fellow in 1864. He died at Kensington on the 21st of October, 1898.



Royal Botanic Gardens, Kew

THE REV. M. J. BERKELEY, M.A., F.R.S.

RECTOR OF KING'S CLIFFE, NORTHAMPTONSHIRE

TO WHOM VOLUME LXXX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER, 1854.

W. J. HOOKER.

REV. MILES JOSEPH BERKELEY

(1803-1889)

MILES JOSEPH BERKELEY was born at Biggin Hall, near Oundle, Northamptonshire, on the 1st of April, 1803. From Oundle Grammar School he went to Rugby, and entered Christ's College, Cambridge, in 1821, graduating in 1825. His scientific tendencies showed themselves at an early age, and these were stimulated at Cambridge through friendship with Professor J. S. Henslow. He became Curate of St. John's, Margate, in 1827, and later went as Rector of King's Cliffe, Northamptonshire. In 1868 he was appointed Vicar of Sibbertoft, near Market Harborough.

After turning for a time to the study of the *Mollusca*, he soon devoted his leisure wholly to botany, particularly mycology. In 1832-33, while he was at Margate, appeared *Gleanings of British Algae*, a booklet illustrated by twenty coloured plates, his earliest botanical production of note. A more important task, which brought him enduring fame, was the volume on fungi in W. J. Hooker's edition of Sir J. E. Smith's *English Flora*. In the opinion of many mycologists that great work, requiring immense labour and research, is the most complete mycologic flora ever produced. It appeared in 1836. His *Introduction to Cryptogamic Botany*, 1857, for long remained a standard work. Other of his outstanding publications were the *Outline of British Fungology*, published in 1860, and the *Handbook of British Mosses*, 1863. Besides these works he contributed a great number of papers to various journals.

In the middle 'forties of the century he began to interest himself in plant diseases, and especially in the potato murrain which was then ravaging crops in the British Isles. The account of his investigation of this, published in 1846, showed that the cause was the fungus now known as

REV. MILES JOSEPH BERKELEY (1803-1889)

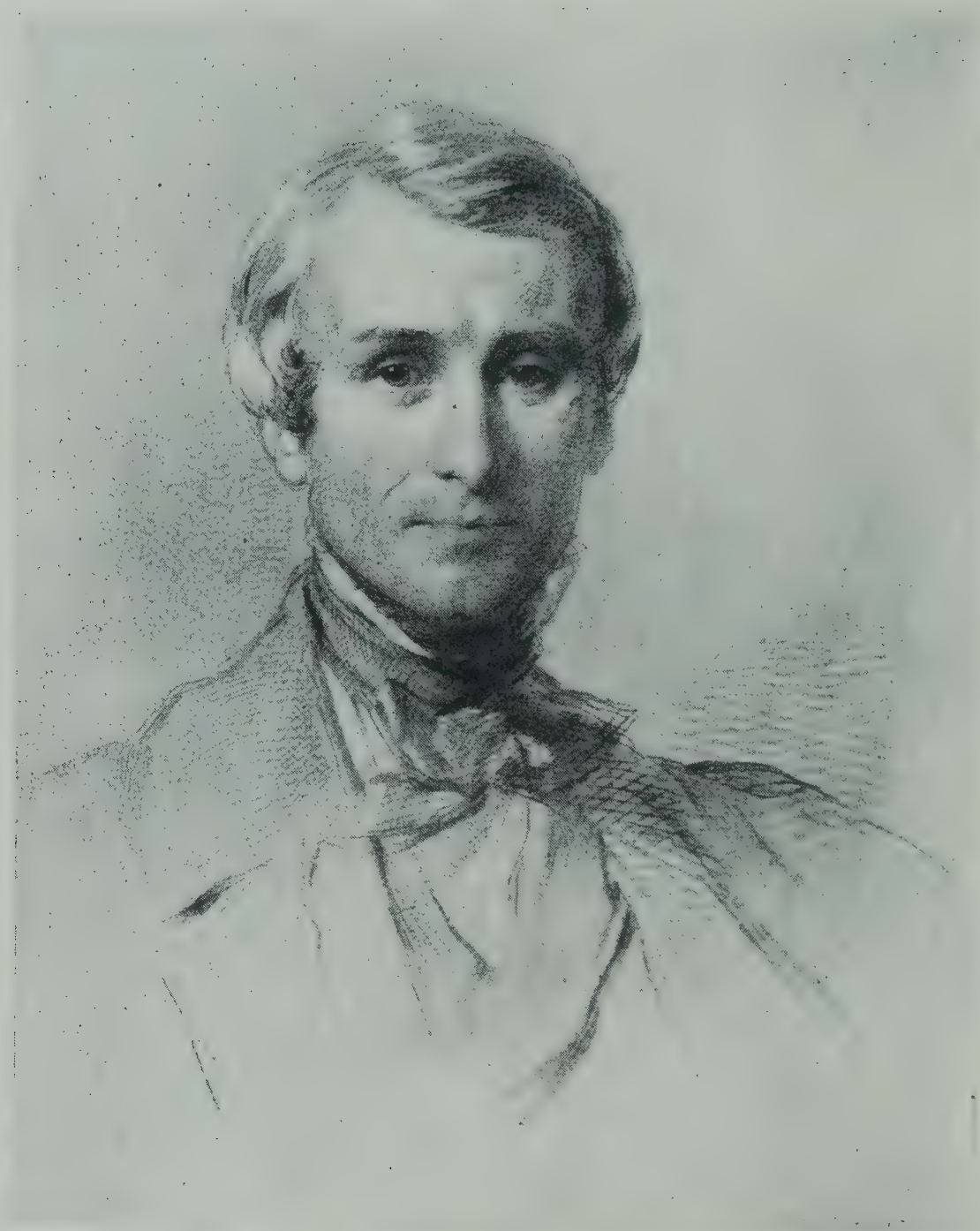
Phytophthora infestans, the life-history of which he worked out.

There followed a similar investigation of the vine-mildew. In the systematic field, too, Berkeley was active. Three Directors of Kew, the Hookers and Sir W. T. Thiselton-Dyer, placed in his hands the various collections of exotic fungi received at that establishment in the half-century that they held office. During that period many new genera and six thousand new species from all parts of the world were described by him and, in numerous instances, illustrated.

In 1879 Berkeley presented his mycological herbarium to Kew. This collection contained ten thousand species, half of which were his own types. The extent to which it illustrates the life-history of many horticultural and agricultural pests makes it unique of its kind.

He received the Gold Medal of the Royal Society, an honour he valued most highly, in 1863, and became a Fellow of that Society in 1879. He had been elected a Fellow of the Linnean Society in 1836. The honorary fellowship of his college was conferred on him in 1889, shortly before his death. In his later years he acted as scientific adviser to the Royal Horticultural Society. His name is commemorated in *Berkeleya*, a genus of diatoms.

Berkeley was not ambitious : he was too enthusiastic a scientist to be self-seeking. He was an excellent classical scholar, and he himself educated his fifteen children. His death took place at Sibbertoft on the 30th of July, 1889.



Royal Botanic Gardens, Kew.

DR. THOMAS THOMSON, M.D., F.R. AND L.S.

SUPERINTENDENT OF THE
HON. EAST INDIA COMPANY'S BOTANIC GARDEN OF CALCUTTA

TO WHOM VOLUME LXXXI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER, 1855.

THE AUTHOR.

DR. THOMAS THOMSON

(1817-1878)

THOMAS THOMSON was born in Glasgow on the 4th of December, 1817. He was educated at the High School and University of Glasgow, where he graduated M.D. in 1839. Although he obtained high honours in classics and mathematics, it was science which attracted him most. His father wished him to make chemistry his profession, and to this end he devoted much study. Later, when he began his medical studies, the effect of Sir William Hooker's lectures lured him towards botany.

After taking his degree he entered the service of the Honourable East India Company as assistant surgeon and, on his arrival in Calcutta in 1840, was appointed Curator of the Museum of the Asiatic Society. He had scarcely commenced his new duties when he was ordered to take a party of European recruits to Afghanistan. It took more than a year to reach Kabul where, after exploring a new, rich flora, he was soon involved in the Afghan campaign. In Ghazni he and others were besieged during the winter of 1841-42 and, after daily losses from cold, sickness, starvation, and the enemy's fire, the survivors capitulated and were imprisoned. Subsequently they were taken to Kabul, thence to be transported to Bokhara to be sold into slavery, but on the way there they bribed their captor to conduct them back to the advancing British relief force. Having lost all his collections and personal effects, Thomson returned to India.

Owing to the exertions of Sir W. Hooker and other friends he was appointed with two other commissioners, in 1847, to mark the boundary between Kashmir and Chinese Tibet. They reached the Tibetan frontier in August, 1847, but the Chinese commissioners did not put in an appearance. Thomson travelled northwards to Kashmir. He spent some

months investigating the botany and geology of that country, and, after further explorations, was detained on the return to India by the second Sikh war. The results of these journeys were published in 1852, after his return to England, under the title of *Western Himalaya and Tibet ; a Narrative of a Journey . . .*, 1847-48.

While Thomson was in the western Himalayas, J. D. Hooker explored the eastern. The two met at Darjeeling at the end of 1849, Hooker having escaped from the clutches of the Sikkim Rajah some weeks after the arrival of his friend. They spent more than a year together botanizing in the Sikkim mountains and the Khasi forests, and returned to England in March 1851 with thousands of plant specimens and voluminous notes. Several years were spent in the determination and distribution of the collections. Thomson was broken in health, but he and Hooker laboured early and late on their task. Influential friends vainly sought to prevail on the East India Company to grant him monetary aid in his work.

Besides various contributions on Indian botany to the botanical journals, Thomson, in collaboration with J. D. Hooker, published the *Flora Indica* in 1855. Of this, owing to lack of funds, only one volume appeared. It monographs only a few families, but opens with an essay on the climate and botanical geography of every district of India.

Thomson was appointed to the charge of the Calcutta Botanic Garden in 1854, and to the Chair of Botany at Calcutta Medical College. He came back to England in 1861 a confirmed invalid. Except for a short trip to India once again, as interpreter to the Eclipse Expedition of 1871, he resided for the remainder of his life first at Kew and subsequently at Maidstone, but spent the last few months in London, where he died on the 18th of April, 1878. He was elected a Fellow of the Linnean Society in 1852, of the Royal Geographical Society in 1854, and of the Royal Society in 1855.



Courtesy of T. Hay, Esq.

THE LADY DOROTHY NEVILL

TO WHOM VOLUME LXXXII.

IS INSCRIBED

ROYAL GARDENS, KEW,
DECEMBER 1, 1856.

THE AUTHOR.

LADY DOROTHY NEVILL

(1826-1913)

DOROTHY FANNY NEVILL was born on the 1st of April, 1826, at the house in Berkeley Square where Horace Walpole had lived. By birth she was Lady Dorothy Walpole, daughter of the third Earl of Orford of Wolterton, in Norfolk. She was not a direct descendant of the great Sir Robert Walpole but of his brother, and was named Dorothy after Sir Robert Walpole's sister.

Most of her childhood was passed in Norfolk, but when she was in the 'teens the family made two long tours abroad. Visits to Munich and Rome were memorable events which had a great effect on her receptive young mind.

In 1847 Lady Dorothy married her cousin, Reginald Nevill, and she settled down as the wife of a country gentleman with a small estate in Sussex and a house in London. In town she had an opportunity of cultivating social gifts, which found their full scope in her later life. She was profoundly conscious of the fact that she was connected with some of the leading families of England, and was a keen Conservative; but she cheerfully accepted the changes which time brought to society. Her friends were numbered among politicians of all parties, men and women of letters, artists, and men of science. Dullness was her one antipathy, and up to the end she was one of the liveliest of any company.

At Dangstein, near Midhurst, Sussex, Lady Dorothy made a beautiful garden. She was a successful grower of orchids and of tropical plants such as *Nepenthes*. In the 'seventies the Dangstein collection of rare plants was regarded as one of the finest in cultivation. The estate was broken up in 1879 and the orchids sold. Even up to near the end of her life she was a frequent and well-known visitor

LADY DOROTHY NEVILL (1826-1913)

to the fortnightly meetings of the Royal Horticultural Society. Her favourite flower was the primrose, and she was concerned in the institution of Primrose Day in honour of Disraeli.

Lady Nevill's *Reminiscences*, edited by her son, Ralph, were published in three volumes during her later years. These throw a pleasant light on her character. They tell how she was able to form and keep for many years a real friendship with three such different men as Disraeli, Cobden, and Joseph Chamberlain. Disraeli, who wrote to her as 'My dearest Dorothy,' had been the intimate friend of her brother. Cobden was her neighbour in Sussex, where, of course, so dangerous a Radical was practically boycotted. Lady Dorothy had no such feelings, and she and the great Free Trader discussed gardening and public affairs in good temper. Her friendship with Chamberlain began over orchids.

Lady Dorothy Nevill prided herself on having no fads. It is recorded that she never had a day's illness. She died on the 24th of March, 1913.



Royal Botanic Gardens, Kew.

J. T. MACKAY, ESQ., LL.D.

THE VETERAN BOTANIST OF IRELAND

TO WHOM VOLUME LXXXIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1857

THE AUTHOR.

JAMES TOWNSEND MACKAY

(1775-1862)

JAMES TOWNSEND MACKAY was born at Kirkcaldy, Fifeshire, on the 29th of January, 1775. After an elementary school education he was trained as a gardener, an occupation which he followed for a while in his native country before going, in 1803, to Ireland.

About this time the authorities at Trinity College, Dublin, decided to form a botanical garden as an aid to the lectures given by the Professor of Botany there. Mackay was appointed to lay out the garden, and in 1806 became Curator, a post he held until his death.

In 1804, and again in 1805, he visited the west of Ireland to study the indigenous flora which up to that time had been imperfectly investigated. As a result, he published in the following year his *Systematic Catalogue of Rare Plants found in Ireland* in the *Transactions of the Royal Dublin Society*. A larger work of his, based on this, appeared in the *Transactions of the Royal Irish Academy* for 1825, under the title of *Catalogue of the Plants found in Ireland*. This again was enlarged into his *magnum opus*, the *Flora Hibernica*, issued in 1836, Drs. W. H. Harvey and T. Taylor being responsible for the cryptogams.

Several of Mackay's finds in the south and west of Ireland were new to the recorded flora of the British Isles, among them being *Erica mediterranea*, *Draba incana*, *Arabis ciliata*, and *Rhynchospora fusca*. He also discovered new species of algae. A genus of sea-weeds was named *Mackaia* in his honour by S. F. Gray in 1821. In 1859 Harvey commemorated him in a beautiful, blue-flowered, African shrub, *Mackaya bella*, a member of the family *Acanthaceae*. *Erica Mackaii*, another addition to the British flora, was discovered by an innkeeper's son whom Mackay had encouraged

JAMES TOWNSEND MACKAY (1775-1862)

in the study of botany. Mackay's herbarium is preserved in Dublin.

He was elected an Associate of the Linnean Society in 1806, and was also a Member of the Royal Irish Academy. In 1850 the title of LL.D. was conferred upon him by the University of Dublin. He died in Dublin on the 25th of February, 1862.



Courtesy of T. Hay, Esq.

THE COUNTESS OF DONERAILE

DONERAILE, IRELAND

TO WHOM VOLUME LXXXIV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1858.

THE AUTHOR.

VISCOUNTESS¹ DONERAILE

(1836-1907)

MARY ANNE GRACE LOUISA LENOX CONYNGHAM was born in 1836. She was a daughter of Mr. George Lenox Conyngham, Chief Clerk of the Foreign Office, and her mother was the only child of the distinguished Irish barrister, Robert Holmes, whose wife was a sister of the ill-fated Robert Emmet, whose doom was sealed at an early age in the rebellion of 1803. Over his career the glamour of romance has been thrown by Thomas Moore in the well-known lines, 'She is far from the land where her young hero sleeps,' addressed to Sarah Curran, a daughter of the famous advocate, to which lady he had been betrothed.

Miss Lenox Conyngham was married on the 20th of August, 1851, to the Hon. Hayes St. Leger, afterwards fourth Viscount Doneraile, celebrated as a keen rider to hounds, who was at one time Master of the Duhallow and at another of the Burton Hounds, and who was a life-long friend of Lord Henry Bentinck, also of the late Viscount Chaplin. A great lover of animals, he had the misfortune to be bitten by a tame fox in January, 1887, and in August of the same year symptoms of hydrophobia made their appearance, which unfortunately proved fatal.

After the tragedy Lady Doneraile made her home at Gresy sur Aix in the old Chateau de Fontanil where she had every opportunity of indulging her love of gardening, and she transformed the old *potager* into a charming flower garden ; and in the ancient orchard through which a little stream wound its way to the coppice she had naturalized much of the local flora. She was greatly missed at Aix, where her charming personality, her beauty, and her hospi-

¹ The title of Countess, used in the dedication, is incorrect.

VISCOUNTESS DONERAILE (1836-1907)

talities, gained her a very wide circle of friends. King George of Greece was a frequent visitor to Fontanil.

During her reign at Doneraile she made the gardens amongst the most beautiful in Ireland, and without in any way detracting from the great natural beauties of the demesne. Doneraile is situated in the midst of the Spenser country, and the flowers mentioned by him and by Shakespeare are still to be found upon the neighbouring hills.

During the time she lived in Grosvenor Street her window flower-boxes drew many visitors, who might have been seen standing in admiration before them. It was for the skilful way in which they were planted and for their beauty that she was awarded the R.H.S. medal, which ever remained amongst her most valued possessions.

Lady Doneraile died at Nice on the 25th of February, 1907, deeply mourned by all who had the privilege of her friendship. Her love of gardening was inherited by her only surviving daughter, Lady Castletown, of Upper Ossory. In the well-known *Book of Beauty* Lady Doneraile's portrait appeared a few years after her marriage.



British Museum.

DECIMUS BURTON, ESQ., F.R.S., F.S.A.

ARCHITECT OF THE PALM-HOUSE AT KEW

TO WHOM VOLUME LXXXV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1859.

THE AUTHOR.

DECIMUS BURTON

(1800-1881)

DECIMUS BURTON, the tenth son of James Burton, a successful builder in London at the beginning of last century, was born on the 30th of September, 1800. Trained in his father's office, he began business as an architect, meeting with early success. One of his first important works was the Colosseum in Regent's Park, the site of which is now occupied by private residences. This was a splendid example of the then fashionable classic style, and its dome, a few feet larger than that of St. Paul's, was a remarkable construction, especially for an architect only twenty-three years old. In 1825 he was appointed by the government to carry out improvements in Hyde Park, including the laying out of the roads and the erection of the façade and triumphal arch at Hyde Park Corner. The disfigurement of Burton's designed structure by an equestrian statue of the Duke of Wellington, which caused a French officer to exclaim: '*Nous sommes vengés!*' was a keen disappointment to him. For years after its erection his will provided to the nation £2,000 for the eventual removal of the statue. It was taken to Aldershot a year after his death. The Athenaeum Club, erected in 1827, was one of his finest works.

In 1828 he began the designing and laying out of the Calverley Park estate, Tunbridge Wells, for Mr. James Ward, and this occupied his time for some years. But for this, his public works would no doubt have been more numerous. His practice afterwards lay chiefly in the erection of country houses, especially plant houses, and the laying out of building estates for the Dukes of Devonshire and Northumberland and other noblemen, and he seemed to find this occupation more agreeable than his earlier struggle for the prizes of the profession. He was connected with

DECIMUS BURTON (1800-1881)

the Board of Works, and buildings in Kew Gardens, including the Palm and Temperate Houses, were erected from his designs and under his superintendence. He was the architect also of buildings in the Royal Botanic and Zoological Societies' Gardens, Regent's Park.

In Burton's day Greek was almost the only style, and he used it with effect and judgment. He was a traveller when travelling was the exception, visiting the classic remains of Italy and Greece, and later extending his observations to Canada and the United States of America. He was a man of wide culture and refinement, and his great amiability of character brought him many friends. The later years of his life were spent partly at St. Leonard's-on-Sea and partly in London, where he died on the 14th of December, 1881, unmarried. He was elected a Fellow of the Royal Society in 1832, and was a Fellow and Vice-President of the Royal Institute of British Architects.



Gardeners' Chronicle.

G. H. K. THWAITES, ESQ., F.L.S.

SUPERINTENDENT OF THE ROYAL BOTANIC GARDEN, PERADENIA, CEYLON

TO WHOM VOLUME LXXXVI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1860.

THE AUTHOR.

GEORGE HENRY KENDRICK THWAITES

(1812-1882)

GEORGE HENRY KENDRICK THWAITES was born in Bristol on the 9th of July, 1812. Though employed as an accountant in that city he became an enthusiastic botanist, and spent most of his leisure studying the lower plants. His first botanical paper, on the occurrence of *Asplenium lanceolatum* near Bristol, appeared in the *Phytologist* for October, 1841. He paid special attention to the cryptogams, particularly the lower algae. His most important discovery, in 1847, was that the diatoms—until then thought to be animals—were of an algal nature. In recognition of his work on these plants, which gained him a wide reputation, Montagne, the great French cryptogamist, dedicated to him the genus *Thwaitesia*. Papers from his pen on the fresh-water algae appeared in the *Annals of Natural History* during 1846-49.

About this time he became a Lecturer in Botany at the School of Pharmacy and at the Medical School in Bristol. In 1847, though supported by such men as Robert Brown, Sir W. Hooker, Lindley, and Montagne, Thwaites was an unsuccessful candidate for the Chair of Science in one of the new Irish colleges.

In 1849 he was appointed Superintendent of the Royal Botanic Gardens at Peradeniya, Ceylon, a post he held until 1880. He turned his attention from the lower plants to an investigation of the rich flora of the island. Many of his finds, including twenty-five new genera, mainly endemic, were described in *Hooker's Journal of Botany* between 1852 and 1856. Specimens were distributed among the principal European herbaria, where Ceylon plants became for the first time well represented. The title of Superintendent, at Ceylon, was altered to that of Director in 1857. Thwaites

GEORGE H. KENDRICK THWAITES (1812-1882)

issued, in the following year, the first of the five parts of his *Enumeratio Plantarum Zeylaniae*, completed in 1864.

His reputation grew. In 1864 the German Imperial Leopoldino-Caroline Academy granted him its Ph.D. He was elected a Fellow of the Linnean Society in 1854, and of the Royal Society in 1865. Two years later Hooker supplemented the commemorative *Thwaitesia* by giving the name *Kendrickia* to a beautiful member of the *Melastomaceae*. Thwaites was made C.M.G. in 1878.

Subsequently he returned to his first love, devoting himself almost entirely to the cryptogams of Ceylon, making numbered sets for distribution as he had done with the phanerogams. The publication of these later results, however, he left to specialists at home.

In the later years of his directorship Thwaites applied his botanical knowledge to practical agriculture. Largely as a result of his labours, such crops as vanilla, cinchona, tea, and Liberian coffee became important products in the island.

Thwaites never left Ceylon after his arrival there. He died at Kandy on the 11th of September, 1882.



Royal Botanic Gardens, Kew

DR. FREDERICK MUELLER, PH. ET M.D.

WHO HAS ADVANCED OUR KNOWLEDGE OF THE BOTANY OF ALL AUSTRALIA

TO WHOM VOLUME LXXXVII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 31, 1861.

THE AUTHOR.

DR. FERDINAND¹ MUELLER

(1825-1896)

FERDINAND JACOB HEINRICH MUELLER was born on the 30th of June, 1825, at Rostock, Germany, and educated for the medical profession at Kiel University. Botany attracted him, and in 1846 he gained his Ph.D. by a thesis on *Capsella Bursa-pastoris*. In that busy year for him he also published a paper on the flora of Schleswig-Holstein.

Developing a tendency to consumption, he decided to seek a more genial climate than that of north Germany, and in 1847 went to Australia. At first he acted as assistant to an Adelaide chemist, but, having some means, soon gave his whole time to botanical and geographical exploration. He left Adelaide for Victoria in 1848 to visit the then almost unknown Australian Alps. He made extensive collections of plants, including species of great interest, and sent duplicates to botanists in Europe. His work soon established his reputation as a young naturalist of great promise and astonishing industry. Mueller made his longest journey in 1855-56 as botanist on an expedition to central and north Australia. Nearly twenty degrees of unexplored country were traversed, and he collected many plants. Up to 1863 it was calculated that he had travelled more than 20,000 miles.

In 1852 Mueller was appointed Government Botanist to the colony of Victoria, and in 1857 Director of the Melbourne Botanic Gardens, a post which he held until 1873, when he was removed in response to popular clamour. This was a bitter blow to him, and he never entered the Gardens again. The herbarium and library remained under his control, and he retained his title of Government Botanist.

From 1857 Mueller's published work on the Australian flora formed a continuous stream. The *Fragmenta Phyto-*

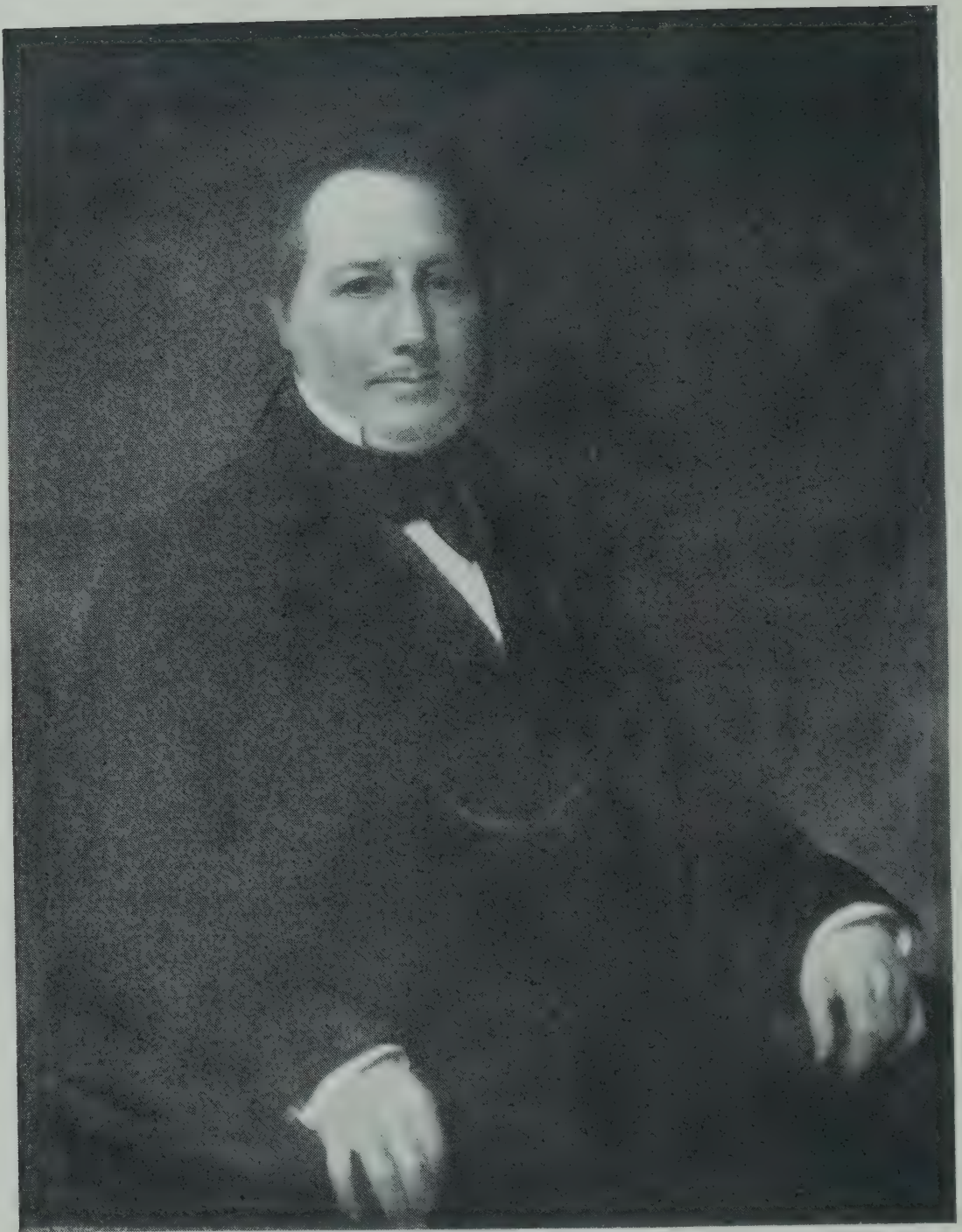
¹ The name Frederick, used in the dedication, is incorrect.

DR. FERDINAND MUELLER (1825-1896)

graphiae Australiae, critical observations on Australian plants, appeared in eleven thin volumes, and one part of a twelfth volume, between the years 1858 and 1882. This was probably the first work in Latin published in Australia. Among other of his notable contributions to botanical literature are *Eucalyptographia*, commenced in 1879 and completed in 1884; a work on the *Myoporinous Plants of Australia*, 1886; the *Iconography of Australian Species of Acacia and Cognate Genera*, which appeared in 1887-88; *Iconography of Australian Salsolaceous Plants*, 1889-91; and the invaluable *Systematic Census of Australian Plants*, 1882, giving the distribution of all known Australian species. A second edition of this appeared in 1889. Mueller was also the author of an important economic work on plants suitable for industrial culture or naturalisation, which passed through many editions, and was translated into several languages.

His great ambition was to prepare a *Flora* of the whole of Australia, and for this he had long accumulated material; but when, in 1861, the question came to a head, he acceded to the view of many botanists that it was essential for the work to be done by some one having access to the type specimens in Europe. He magnanimously gave up the task to Bentham, and sent his extensive herbarium to Kew. How greatly Mueller helped Bentham with the seven volumes of the *Flora Australiensis* is acknowledged in the prefaces to the first and last volumes of that great work.

Honours were showered on Mueller, and he delighted to adorn himself with his many titles and decorations. He was elected a Fellow of the Linnean Society in 1859, of the Royal Society in 1861, and was awarded a Royal Gold Medal in 1888. The King of Württemberg created him an hereditary baron in 1871, and in 1879 Queen Victoria bestowed on him the K.C.M.G. Van Tieghem gave the name *Muellerina*, in his honour, to a new plant genus in 1895. His name is commemorated also in *Austromuelleria*, a north Queensland genus of *Proteaceae*. He died at Melbourne on the 9th of October, 1896.



Linnean Society.

THOMAS BELL, ESQ., V.P.R.S., F.G.S.

LATE PRESIDENT OF THE LINNEAN SOCIETY

TO WHOM VOLUME LXXXVIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 31, 1862.

THE AUTHOR.

THOMAS BELL

(1792-1880)

THOMAS BELL was born at Poole, Dorsetshire, on the 11th of October, 1792. He went as a student to Guy's and St. Thomas's Hospitals, London, in 1813, and to the former establishment he was appointed Dental Surgeon in 1817, a post he held with distinction until 1861. He became a Member of the Royal College of Surgeons in 1815 and a Fellow in 1844.

Early in life he was attracted to natural history, especially zoology, to the study of which he devoted much of his leisure. In 1836 he was appointed Professor of Zoology at King's College, London.

Bell's first published work of importance was a *Mono-graph of the Testudinata*, of which eight parts only were published, in 1836-42. His popular *History of British Quadrupeds*, 1837, was followed in 1839 by the *History of British Reptiles*, and in 1853 by the *History of British Stalk-eyed Crustacea*. A second and much-revised edition of the first *History* appeared in 1874.

The services which Bell rendered to science were not confined to his published works. From 1848 to 1853 he was one of the secretaries of the Royal Society, of which he had been elected a Fellow in 1828, and his administrative ability, energy, and personal popularity led to a great advancement of the Society's interests. On resigning his secretaryship, in 1853, he was elected President of the Linnean Society, an office he held until 1861. He had joined the Society in 1815. The scientific standing and financial position of the Linnean were at that time in a state unworthy of its traditions. He advanced its prosperity by a rigorous supervision of expenditure, by an active enlistment of Fellows, and by generous personal donations to the funds. To him

THOMAS BELL (1792-1880)

especially is due its location in Burlington House, a step to which the governing body was at first strongly opposed. Bell was Vice-President of the Zoological Society for eleven years, and was one of the originators of its scientific meetings. He was President of the Ray Society from its foundation in 1843 till 1859.

At the age of nearly seventy, Bell purchased The Wakes, Selborne, Hampshire, from the grand-nieces of Gilbert White. Giving up systematic scientific work he devoted the long evening of his life to observation of plants and birds in the field, like the famous naturalist of his adopted home. He collected relics and memorials of White, and received pilgrims to Selborne with great delight and hospitality. In 1877, at the age of eighty-five, he published an edition of the *Natural History of Selborne*, in which appears a memoir of White written in Bell's attractive style. He died at Selborne on the 13th of March, 1880.



Royal Botanic Gardens, Kew.

DR. ROBERT WIGHT, M.D.

THE DISTINGUISHED ILLUSTRATOR OF INDIAN BOTANY

TO WHOM VOLUME LXXXIX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1863.

THE AUTHOR.

DR. ROBERT WIGHT

(1796-1872)

ROBERT WIGHT, twelfth child of a family of fourteen, was born at Milton, Duncra Hill, East Lothian, on the 6th of July, 1796. He was educated at Edinburgh High School and took his M.D. at the University in 1818.

He went out to Madras in 1819 as surgeon to a native regiment. India's floral riches attracted him, and he employed native collectors almost from the time of his arrival. Owing to frequent movements of his regiment he made little progress during the first three years. In 1823 he sent home specimens which were lost at sea, but three years later a large number of his Madras plants reached Dr. (afterwards Sir) William Hooker at Glasgow. While Wight had charge of the Madras Botanic Gardens, from 1826 to 1828, he made large collections on a tour through the southern provinces of India. He planned a greater expedition, through the richest botanical districts of the south, but the government abolished his establishment and relegated him to regimental duties as garrison surgeon at Negapatam. His zeal was undiminished, and he accumulated another rich hoard, including many duplicates. These were distributed by him, in 1832-33, to various scientific bodies in Europe.

Wight came to England on sick leave in 1831 and, in collaboration with Dr. Walker-Arnott, prepared the *Prodromus Florae Peninsulae Indiae Orientalis*, 1834, of which only one volume was completed. It describes nearly 1,400 species.

Two more years Wight spent in the Indian army after his return in 1834. His collections became so bulky that it took several native carts to carry them on a march. 'More than six others' conveyed his books and kit!

He left the army in 1836 and took a post in the Revenue

DR. ROBERT WIGHT (1796-1872)

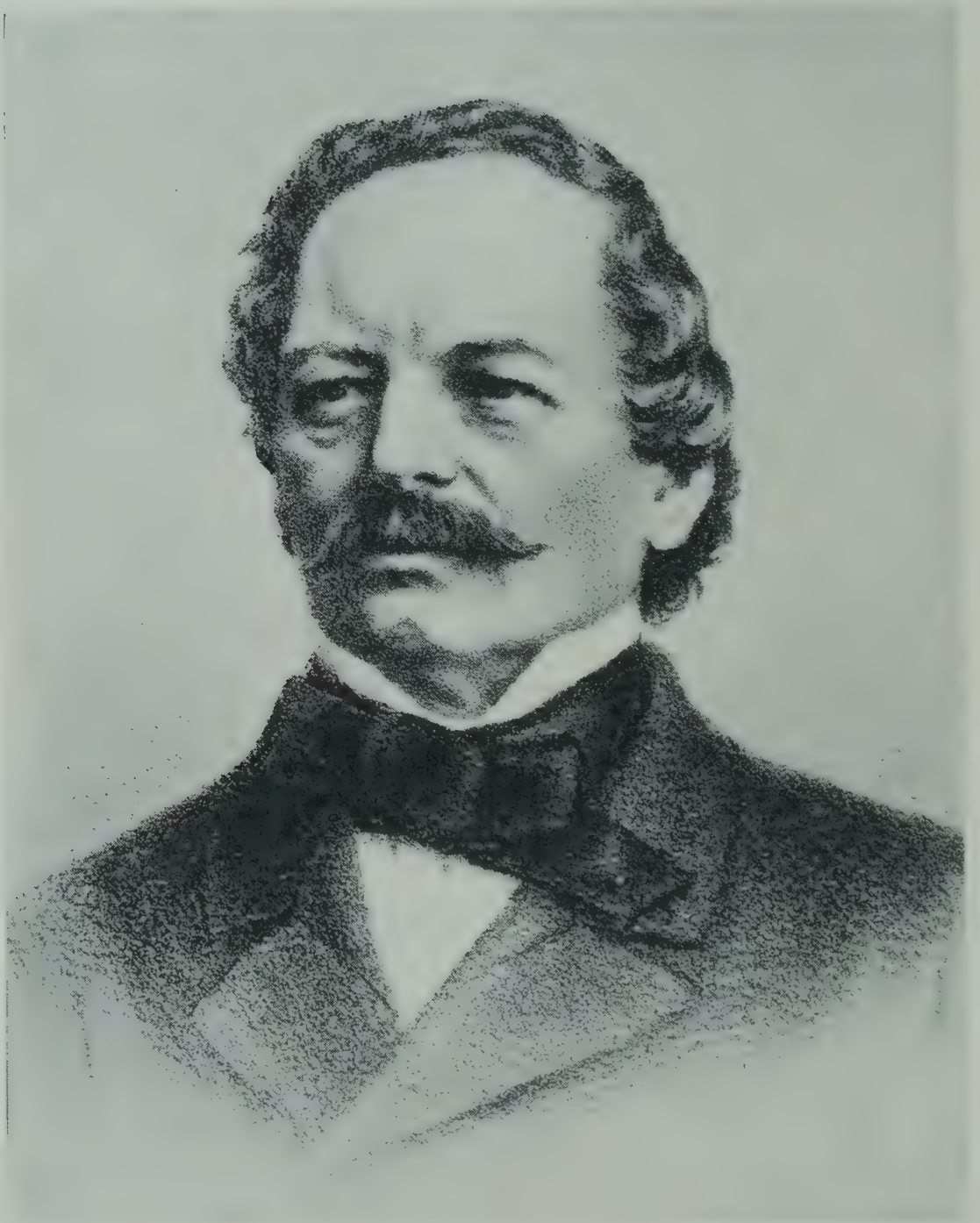
Department, supervising the growing of cotton, tobacco, and other products in India. His experimental plantations were at Coimbatore, and the valuable results achieved there, from 1842 to 1850, are summarised in Royle's *Culture and Commerce of Cotton in India*.

From 1838 to 1850 appeared his *Illustrations of Indian Botany*, in two volumes, consisting of nearly 200 coloured plates. His *Icones Plantarum Indiae Orientalis*, a fifteen years' work of 2,101 uncoloured figures in six volumes, was begun simultaneously and finished in 1853. The completion of these undertakings was ensured by the Madras Government subscribing for fifty copies of each. Among other of Wight's published works is *Spicilegium Neilgherrense*, a selection of Neilgherry plants, in two volumes, issued between 1846 and 1851. There are just over a hundred coloured plates in each volume.

Dr. Wight retired from the public service in 1853 and returned to England. Late in life he conducted a sixty-acre farm, and also assisted Dr. Waring in the editorship by the latter of a *Pharmacopoeia* for India.

Honorary Member of a number of scientific societies, Wight was also Vice-President of the Linnean Society. He had been elected a Fellow of the Society in 1832, and he became a Fellow of the Royal Society in 1855. His friend Wallich commemorated him in the genus *Wightia*.

About a year before his death Wight presented his Indian herbarium to Kew. It consisted of more than four thousand species and contained all his type specimens. He died near Reading on the 26th of May, 1872.



Royal Botanic Gardens, Kew.

DR. FREDERICK WELWITSCH, M.D., A.L.S.

TRAVELLER AND BOTANICAL EXPLORER

TO WHOM VOLUME XC.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1864.

THE AUTHOR.

DR. FREDERICK WELWITSCH

(1806-1872)

FRIEDRICH MARTIN JOSEF WELWITSCH was born on the 5th of February, 1806, at Marisaal, Carinthia, Austria. At the University of Vienna he studied for the legal profession, but natural science drew him away from the law. He entered the University Medical Faculty, becoming greatly attracted to botany. His first scientific paper was on the cryptogamic flora of Lower Austria, published in Vienna in 1834, for which he gained a prize from the mayor of the city. He graduated in medicine with a thesis on the *Nostochineae* of Lower Austria. Fenzl and other botanists became his friends, and he spent much time in the Botanical Museum at Vienna.

In 1839 Welwitsch was commissioned to explore and collect the plants of the Azores and Cape Verde Islands. At Lisbon, in July, he was unavoidably detained, and occupied the time in making a collection of the plants of the neighbourhood. He was so attracted by the country that he decided to remain there for the winter, and began an investigation of the flora of the country. He stayed on in his adopted country until 1853, and had charge, at different times, of the Botanic Gardens at Lisbon and Coimbra. He distributed 56,000 Portuguese plants, including complete sets to the Lisbon and Paris Academies of Sciences. The lower plants were his favourite study, and from around Lisbon, in 1847-52, he added 250 of the larger fungi to those enumerated in Brotero's *Flora*. In his search for algae he 'waded day after day in the Tagus up to his waist in water.' Among his published works on Portuguese cryptogams is the *Genera Phycearum Lusitaniae*, which appeared in 1850.

The Portuguese Government resolved on a scientific exploration of its West African possessions. For this Dr. Welwitsch was selected and in August, 1853, set out on

DR. FREDERICK WELWITSCH (1806-1872)

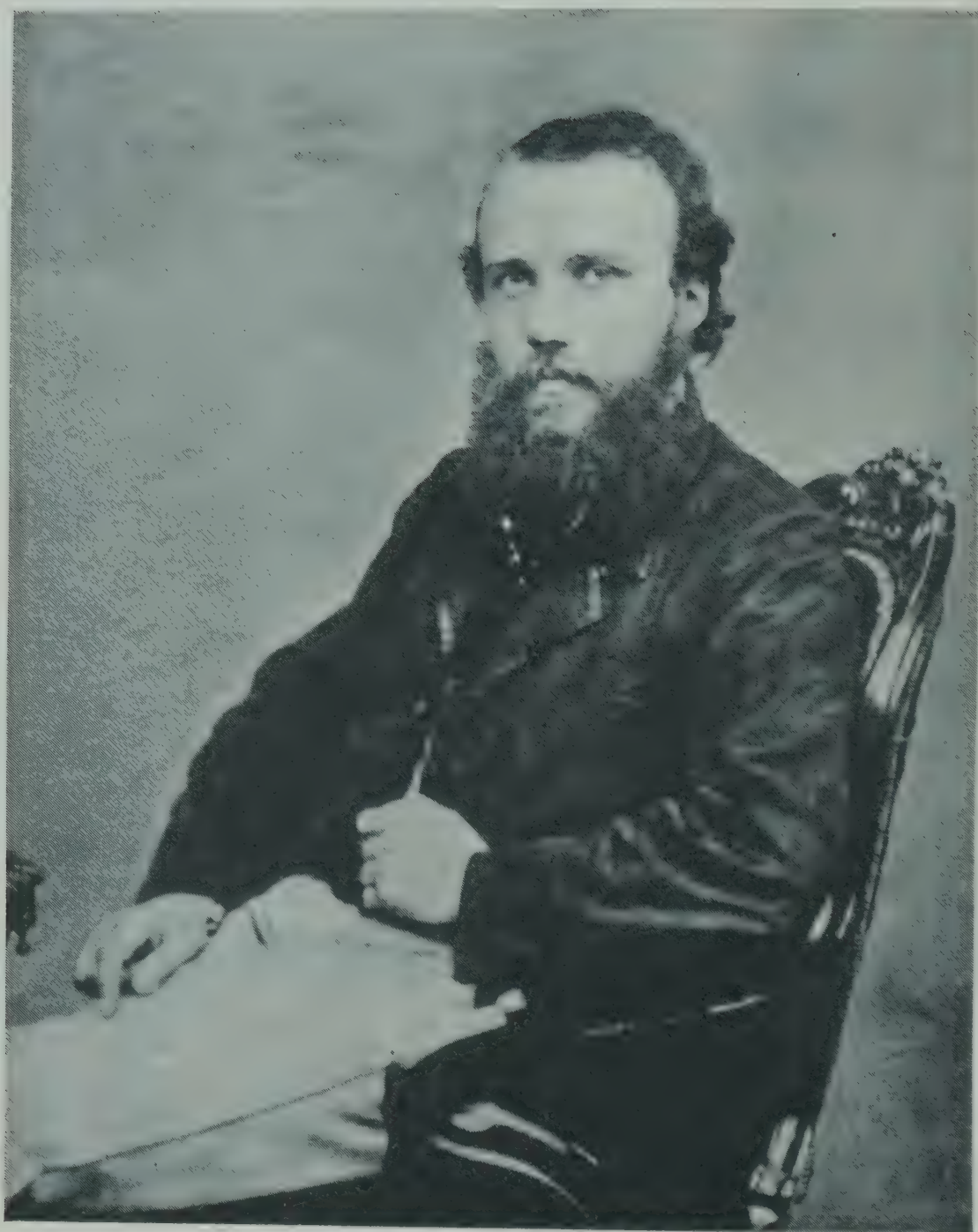
his important mission. He reached Loanda, the capital of Angola, at the end of September, 1853, and at once began a series of excursions, collecting plants and some animals. His travels formed a huge triangle, with 120 miles of coast-line as base, which ultimately brought him back to Loanda in September, 1857.

After a rest to restore his shattered health he, in 1859, began afresh his exploration of South-West Africa. To the southward, on an arid plateau, inland from Cape Negro, he discovered that remarkable plant, *Welwitschia mirabilis*, which Dr. J. D. Hooker declared, in the *Transactions of the Linnean Society*, 1863, to be the most wonderful find of the century.

Welwitsch arrived back at Lisbon with his immense collections early in 1861. His collecting was the most extensive ever done in tropical Africa, as the early volumes of Oliver's *Flora of Tropical Africa* clearly show.

With a grant from his government Welwitsch went to London, in 1863, to work out his plants. After two years he was charged in the Portuguese Parliament with 'selling the Angolan specimens and living in splendour on the proceeds,' and his grant was stopped. This injustice soured him somewhat, but he continued to work at his collections in spite of fever and other ailments. He died in London on the 20th of October, 1872.

The most important published work by Welwitsch on the African flora is *Sertum Angolense*, in the *Transactions of the Linnean Society*, 1869. Twelve new genera and forty-eight new species are described therein. A set of Welwitsch's plants was given to the British Museum, some went to the Portuguese Government, and others were distributed to various European herbaria. A *Catalogue of the African Plants* collected by Welwitsch was prepared by W. P. Hiern and others and published by the British Museum, 1896-1901. He was elected an Associate of the Linnean Society in 1858 and a Fellow in 1865.



Royal Botanic Garden, Edinburgh.

DR. THOMAS ANDERSON, F.L.S.

SUPERINTENDENT OF THE ROYAL BOTANIC GARDENS, CALCUTTA

TO WHOM VOLUME XCI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1865.

J. D. HOOKER.

DR. THOMAS ANDERSON

(1832-1870)

THOMAS ANDERSON was born in Edinburgh on the 26th of February, 1832. He was educated at the Edinburgh Institution and at the University, where he graduated as M.D. in 1853, his thesis on the physiological and therapeutic actions of *Atropa Belladonna* earning high commendation. During his university career he obtained a gold medal for the best collection of herbarium specimens made within ten miles of Edinburgh. The plants of India particularly interested him, and he helped to arrange the Indian herbarium at Edinburgh.

He joined the Bengal Medical Service in 1854 and went to Calcutta, whence he proceeded to the North-West Provinces to take charge of a native regiment. A new appointment took him to the Lucknow district in 1856, and while there he wrote a short account of the flora. In the early summer of 1857 he obtained leave, and went plant-hunting in one of the highest Himalayan passes. Unable to return to Lucknow because of the Mutiny, he managed to reach Delhi, and was actively engaged in the campaign as a medical man and as a soldier.

In the following year he went back to Calcutta as Garrison Assistant-Surgeon at Fort William, but through ill-health was forced to leave India. His steamer was detained at Aden for some days, and this enabled him to make a collection of plants on which he based his *Florula Adenensis*, published in 1860 as a *Supplement* to the fifth volume of the *Journal of the Linnean Society*. He was elected a Fellow of this Society in 1859.

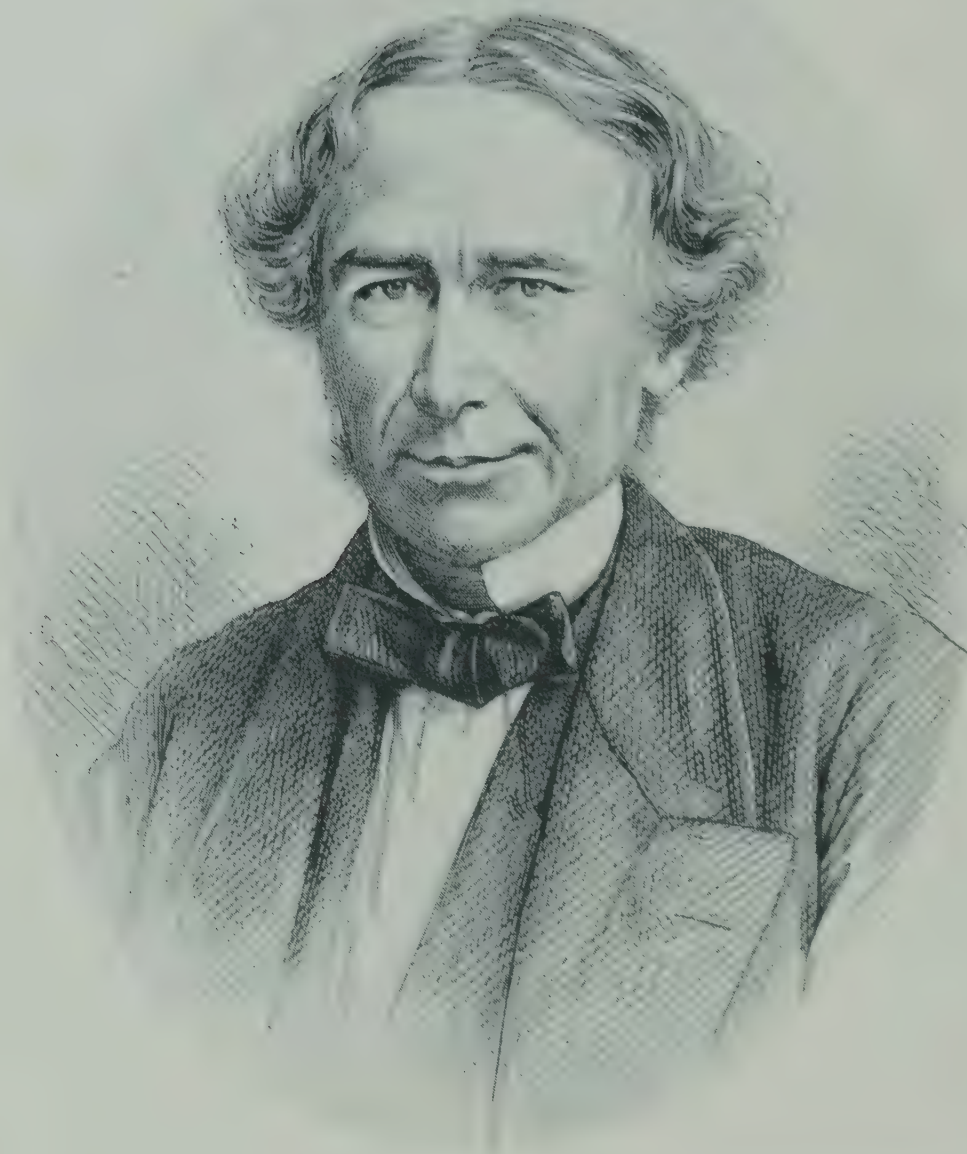
In 1860 he returned to India and took charge of the Calcutta Botanic Garden during the absence of Dr. Thomas Thomson, whom he subsequently succeeded as Superintendent. He greatly improved the Garden and helped in

DR. THOMAS ANDERSON (1832-1870)

the introduction of several valuable medicinal plants to India, including cinchona and ipecacuanha. He managed the first cinchona experimental plantations, but early results were disappointing and his *Reports* tell how, step by step, success was won. He was often on horseback for ten or twelve hours in the day, going from warm tropical valleys up to Darjeeling, which he would reach chilled and exhausted. For some time before his death he was attempting a similar service with ipecacuanha.

Dr. Anderson undertook, in 1864, to organise and superintend the Forest Department in Bengal. This post he held for two years, when pressure of other work led him to resign.

Serious illness compelled him in 1868 to return home, which he reached in a very weak state, but recovered sufficiently to commence work on a flora of India, the materials for which had been accumulated by himself and others, including Roxburgh, Wallich, Wight, Arnott, Hooker, and Thomson. He began in earnest, giving special attention to the *Acanthaceae*, but in 1870 suffered a relapse from which he never rallied. He died in Edinburgh on the 26th of October, in that year, at the early age of thirty-eight.



Gardeners' Chronicle.

WILLIAM WILSON SAUNDERS, F.R.S.

TREASURER AND VICE-PRESIDENT OF THE LINNEAN SOCIETY

TO WHOM VOLUME XCII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1866.

JOS. D. HOOKER.

WILLIAM WILSON SAUNDERS

(1809-1879)

WILLIAM WILSON SAUNDERS was born near Wendover, in Buckinghamshire, on the 4th of June, 1809. He was educated privately and at the East India Company's Military Academy at Addiscombe, Surrey. Obtaining a commission in the Engineers in 1829, he went with his corps to India in the following year, but resigned in 1831. While in India he became interested in natural history, and made collections of plants and insects which he brought back to England.

He went to live at Wandsworth, and joined his future father-in-law in business at Lloyd's. Entomology and horticulture were his chief hobbies, but he also made an extensive herbarium; and he exhibited a collection of woods at the Great Exhibition of 1851. His entomological collections included insects of every order, and were probably among the most extensive known. He was one of the first members of the Entomological Society.

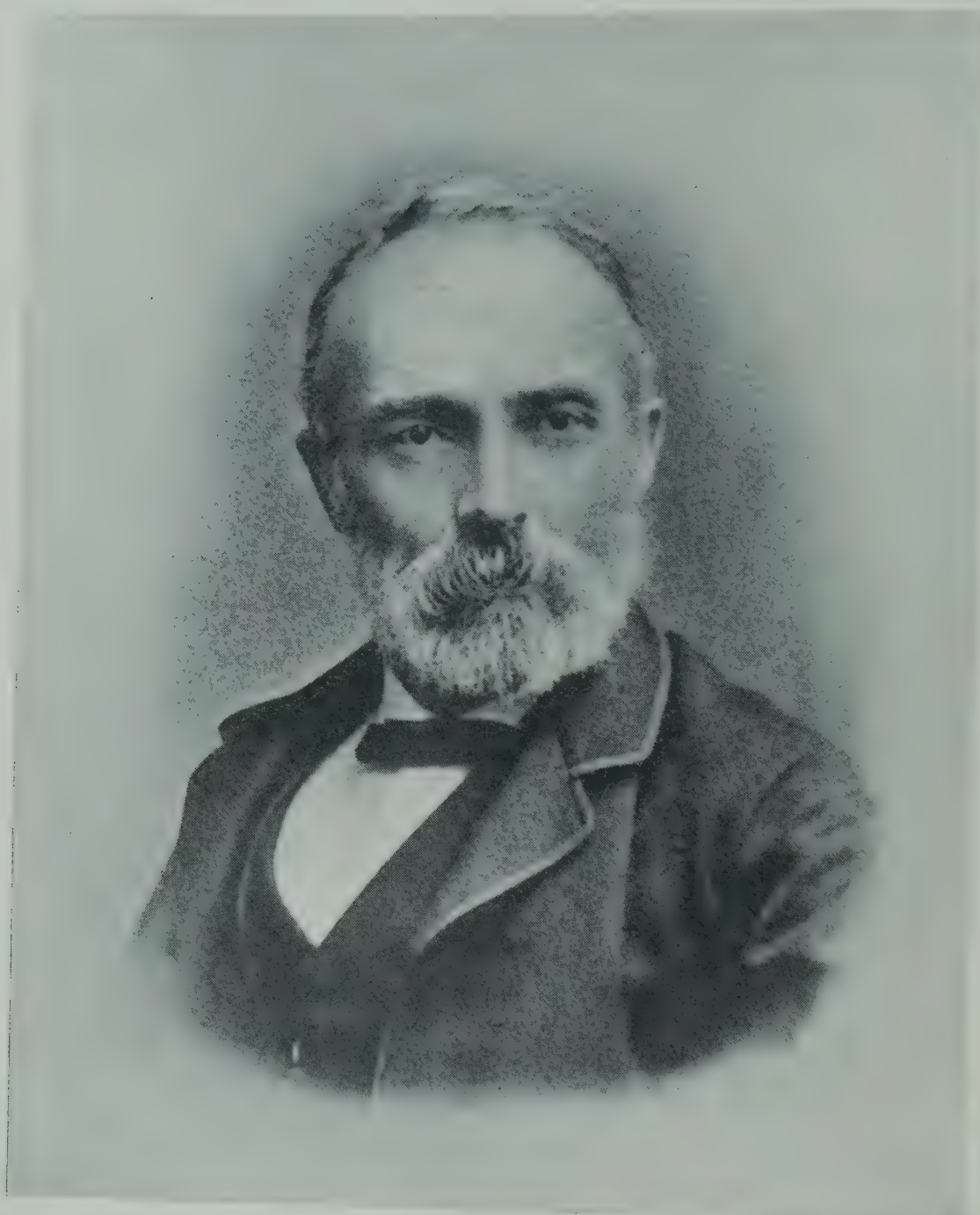
Saunders moved to Reigate in 1857 and founded the Holmesdale Natural History Club, of which he was President for many years. He cultivated succulent plants which could not be well represented in the dried state, and the smaller and more obscure species of orchids also attracted his attention. It was mainly to bring these plants to the prominent notice of the botanical world that he began the publication of the *Refugium Botanicum* in 1868. Prof. H. G. Reichenbach gave him valuable assistance in the descriptions of the orchids figured in this work, and J. G. Baker helped him with the representatives of other families. Most of the plates were from drawings by W. H. Fitch, but some were his own. Five volumes were published. Fungi also interested him, and many of his drawings were reproduced in *Mycological Illustrations*, a work he began to edit, in

WILLIAM WILSON SAUNDERS (1809-1879)

association with others, in 1871. He was the editor also of *Insecta Saundersiana*, descriptions of the insects in his collection, issued between 1850 and 1869.

A crisis in the business world, involving the firm of which he was then the head, led to his disposing of his great collections of insects, as well as his living and herbarium plant specimens and water-colour drawings. He retired to Worthing, Sussex, to devote himself to horticulture, and resided there until his death on the 13th of September, 1879.

On several occasions Saunders was President of the Entomological Society and many times Vice-President. He was for several years Vice-President of the Royal Horticultural Society, and took an active part on its Council. He was elected a Fellow of the Linnean Society in 1833, of the Royal Society in 1853, and of the Zoological Society in 1861. From 1861 to 1873 he acted as Treasurer of the Linnean Society. His name was commemorated by Reichenbach in the orchid genus *Saundersia*.



Royal Botanic Gardens, Kew.

DANIEL OLIVER, F.R.S., F.L.S.

KEEPER OF THE HERBARIUM AND LIBRARY IN THE ROYAL GARDENS, KEW,
AND PROFESSOR OF BOTANY IN UNIVERSITY COLLEGE, LONDON

TO WHOM VOLUME XCIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1867.

JOS. D. HOOKER.

DANIEL OLIVER

(1830-1916)

DANIEL OLIVER was born at Newcastle-upon-Tyne on the 6th of February, 1830. Educated at the Friends' School, Wigton, he early showed a keen interest in natural history and joined the Tyneside Naturalists' Field Club. Between 1847 and 1852 he contributed papers to the *Phytologist* describing his finds on botanical excursions in the north of England and in Ireland.

In 1858, at the invitation of Sir William Hooker, he went to Kew and took up work in the Herbarium. J. D. Hooker was busy on his Australian, Antarctic, and Indian collections, and Oliver went to his aid, working very hard for a modest remuneration. He also gave Hooker valuable help in the production of the *Botanical Magazine* and the *Icones Plantarum*.

Oliver succeeded Lindley as Professor of Botany at University College in 1861, holding this office until 1888. He lectured there at 8 A.M. from May to July so as to avoid encroaching on his official work at Kew. From 1859 to 1874 he gave a free course of lectures to the Kew gardeners.

Allan Black, the Curator of the Kew Herbarium, retired in 1864, and Oliver succeeded him as Keeper of the Herbarium and Library, a post which he held until 1890. In addition to discharging the duties of his office with untiring zeal and conscientious devotion, he found time for scientific work.

He was responsible for several editions of the Official Guide to the Kew Museums and of the Guide to the Gardens. His useful work, *Lessons in Elementary Botany*, first published in 1864, went into many editions. For some years he edited *Hooker's Icones Plantarum*, in which he published many

DANIEL OLIVER (1830-1916)

novelties, including some of A. Henry's Chinese discoveries. He edited, and largely contributed to, the first three volumes of the *Flora of Tropical Africa*, published in 1868-77. In addition to being responsible for the botanical report of various expeditions he was the author of a host of papers in the pages of the *Journal of the Linnean Society* and other journals.

He had an aversion to personal honours, but was prevailed upon to receive a Fellowship of the Royal Society in 1863, the Medal of this Society, 1884, and the Linnean Gold Medal, 1893. He had been elected a Fellow of the Linnean Society in 1853. In 1891 the honorary degree of LL.D. was conferred on him by the University of Aberdeen. The Edinburgh Botanical Society made him one of its six Honorary Fellows in 1882. He is commemorated in the plant genera *Oliverella* and *Oliverodoxa*.

After his retirement he spent his time in gardening and painting. He was an excellent draughtsman, his special subjects being landscape, trees, and architecture. Even during his official life he had issued among his friends a series of *Decades* of plant and animal forms. A friend has told how he was sometimes privileged to accompany Oliver on his evening walk along the Thames side, 'learning from his talk much about Turner and art generally.' Oliver was a great admirer and personal friend of John Ruskin.

His life was almost free from sickness, and the end came on the 21st of December, 1916, at Kew, after only a few days' illness. He was interred in the Quaker burial ground at Isleworth.



Gardeners' Chronicle.

PROFESSOR HEINRICH GUSTAV REICHENBACH

DIRECTOR OF THE HAMBURG BOTANIC GARDENS

TO WHOM VOLUME XCIV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1868.

J. D. HOOKER.

PROF. HEINRICH GUSTAV REICHENBACH

(1823-1889)

HEINRICH GUSTAV REICHENBACH was born at Leipzig on the 3rd of January, 1823, the son of H. G. L. Reichenbach, author of the classical *Icones Florae Germanicae*.

From the age of twenty-nine, when the thesis with which he had graduated, an essay on orchid pollen, was published, until his death, the younger Reichenbach made an intensive study of orchids. In 1863 he was appointed to the twin posts of Professor of Botany and Director of the Botanic Gardens, Hamburg University. The duties connected with these offices occupied much of his time, as also did his correspondence, which he carried on with almost every grower of orchids, both amateur and professional.

After the death of Lindley, in 1865, Reichenbach became the Orchid King. Specimens from far and near were sent to him for identification, and these with his sketches and copious notes went to build up an immense herbarium. Correspondents were always sure of an answer, friendly, but sometimes tinged with wit or sarcasm or both. It must be said that he resented the intrusion of others into what he considered his preserve.

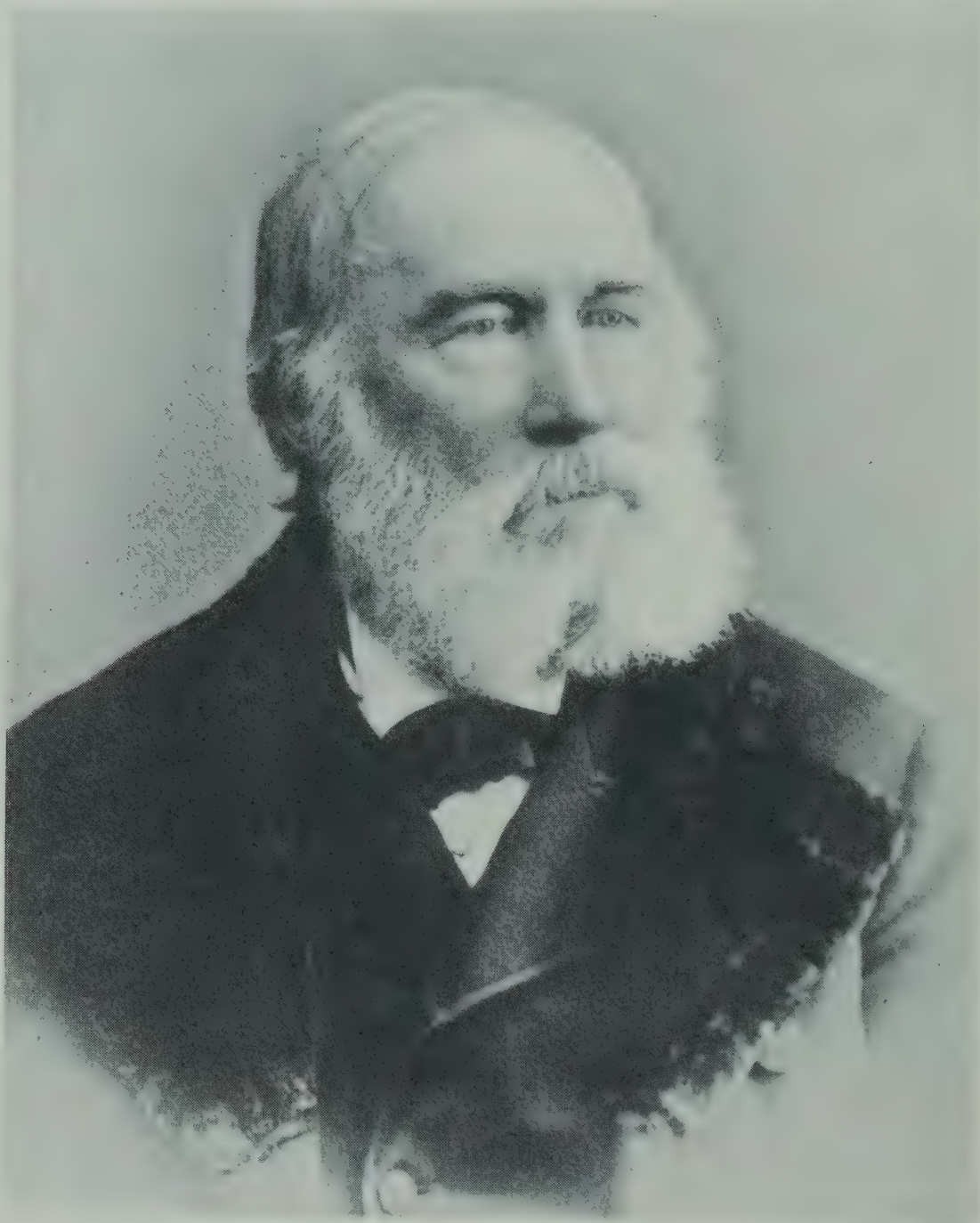
The terms of Reichenbach's will, as it affected his herbarium, caused a sensation in the scientific world. To quote: 'My herbarium and my botanical library, my instruments, collections of seeds, etc., accrue to the Imperial Hof Museum in Vienna, under the conditions that the preserved Orchids and drawings of Orchids shall not be exhibited before twenty-five years from the date of my death have elapsed. Until this time my collections shall be preserved in sealed cases.' Names of other institutions were given as recipients in case Vienna demurred to the conditions. But Vienna accepted, and the botanical world

PROF. HEINRICH G. REICHENBACH (1823-1889)

was deprived of his valuable type specimens for a quarter of a century.

His first important published work was done in connection with his father's *Icones* in which the volume devoted to the *Orchidaceae*, which appeared in 1850-51, was wholly by him. This task, his preface says, occupied him ten years. For this and for other volumes he prepared the drawings to the number of no fewer than 1,500. He sent an article on his favourite plants to the *Gardeners' Chronicle* almost weekly from 1865 up to the end of his life. The *Orchidaceae* were worked out by him for Seemann's two works, *Flora Vitiensis* and *Botany of the Voyage of H.M.S. Herald*. He also described the plants of that family for the *Refugium Botanicum* from 1869-72, and for the journal, consisting of illustrations and descriptions of orchids, and named in his honour *Reichenbachia*, which was issued from 1888-94. His systematic work, though excellent, was lacking in co-ordination, and his nearest approach to a synopsis of the family is to be found in the sixth volume, 1861-64, of *Walpers Annales*, where he brought together, on nearly 800 pages, the species described between 1851 and 1855 with the addition of many new ones.

Reichenbach was elected a Foreign Member of the Linnean Society in 1879, and was an Honorary Fellow of the Royal Horticultural Society. The Veitchian Medal was awarded him in 1885, and at Ghent, a year before his death, the King of the Belgians presented him with a medal specially struck in his honour. His name is commemorated in *Reichenbachanthus*, a genus of Brazilian orchids. He died at Hamburg on the 6th of May, 1889.



Courtesy of Miss Fitch.

WALTER FITCH, ESQ., F.L.S.

ARTIST AND LITHOGRAPHER

TO WHOM VOLUME XCV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1869.

Jos. D. HOOKER.

WALTER FITCH

(1817-1892)

WALTER HOOD FITCH was born in Glasgow on the 28th of February, 1817. At an early age he was employed in designing patterns for textile fabrics, spending his evening leisure glueing down plants for the recently appointed University Professor, Dr. (afterwards Sir) William Hooker. He also copied some outlines of plants, which so much impressed Hooker that he paid back Fitch's apprentice fee to the master of the printing works at which he was serving his indentures. Thus began Fitch's career as a botanical artist.

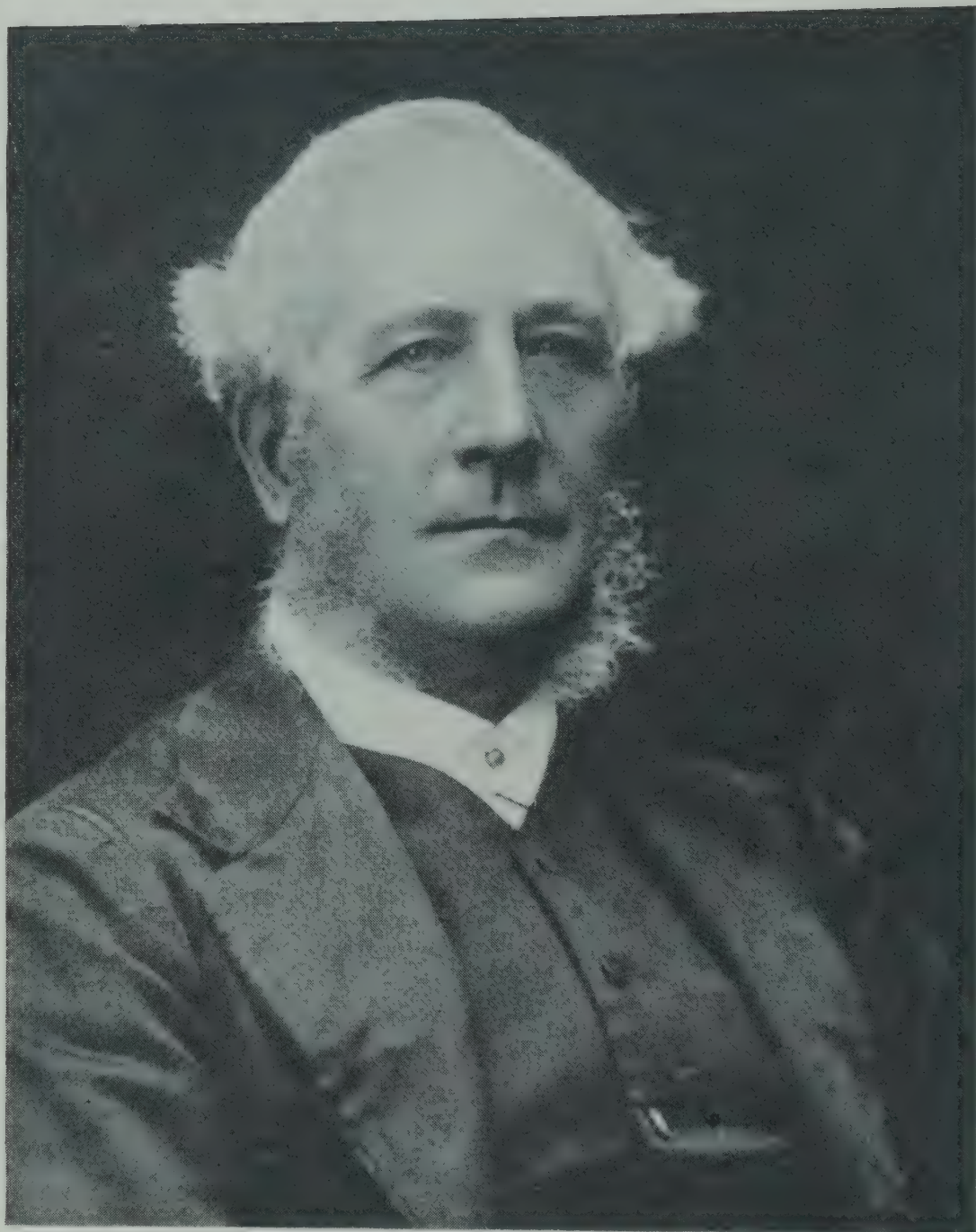
He became associated with Sir William Hooker in his botanical publications and made rapid progress. In the *Botanical Magazine*, which contains much of his best work, his name first appeared on plate 3353, *Mimulus roseus*, issued in October, 1834. For the *Icones Plantarum*, founded by Sir William in 1836, he also began a long illustrative work. He accompanied Hooker to Kew in 1841, and spent the remainder of his life there. Many publications were illustrated by Fitch during the ensuing forty years. The plates of Hooker's *Genera Filicum*, 1842, taken from drawings by Bauer, represent some of Fitch's early work. The illustrations were praised in Hooker's preface to the publication as follows: 'They have all been executed under my own eye in zincography by a young artist, W. Fitch, with a delicacy and accuracy which I trust will not discredit the figures from which they were taken.' For the younger Hooker he illustrated the New Zealand, Antarctic, and Tasmanian *Floras*, and his work on that author's *Illustrations of Himalayan Plants* is praised in the preface, where Sir Joseph speaks of the 'unrivalled skill of this incomparable botanical artist.' Other examples of Fitch's art are to be found in Seemann's *Botany of the Herald* and *Flora Vitiensis*, Welwitsch's *Sertum*

WALTER FITCH (1817-1892)

Angolense, Bentham's monographs of *Mimoseae* and *Cassia*, Triana's *Les Mélastomacées*, Bateman's *Monograph of Odontoglossum*, and Warner's *Select Orchidaceous Plants*. The fine folio plates of Elwes's monograph of *Lilium*, 1877-80, where his name appears on the title-page, represent important work; and the 360 plates in Saunders's *Refugium Botanicum*, drawn by Fitch, are good examples of clear, simple outlines combined with accurate and sufficient detail. This is but a small selection of Fitch's work: his published drawings have been estimated to number as many as ten thousand. His long connection with the *Botanical Magazine* and the *Icones Plantarum* came to an end in 1877 as the result of a dispute between him and his employers at Kew.

What appears to have been Fitch's only contribution to literature was the splendid series of lessons on *Botanical Drawing*, published in the *Gardeners' Chronicle* in 1869.

His power seemed to consist chiefly in what Sir Joseph Hooker called 'seizing the natural characters of plants.' He had also a keen sense of form. Sir Joseph Hooker commemorated his name in *Fitchia*, a handsome genus of *Compositae*. He was elected a Fellow of the Linnean Society in 1857. His death took place at Kew on the 14th of January, 1892.



Courtesy of T. Hay, Esq.

REV. C. PARISH, M.A.
OF MOULMEIN

TO WHOM VOLUME XCVI.
IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1870.

JOS. D. HOOKER.

REV. CHARLES PARISH

(1822-1897)

CHARLES SAMUEL POLLOCK PARISH was born at Calcutta on the 26th of January, 1822. He was educated at Oxford University, where he took his B.A. in 1841.

Eleven years later he was appointed Indian Chaplain at Moulmein, Burma. Almost at once he began to collect orchids. Some of these were sent home, both in the dried and living state, while others he grew in his garden. Sir W. J. Hooker was the recipient of many fine specimens of orchids, ferns, and other plants from him, and the two corresponded for many years. Those two great orchidologists, Lindley and H. G. Reichenbach, spoke in glowing terms of Parish's discoveries, and formed a high opinion of the quality of his specimens and accompanying sketches. A large number of orchids from the country around Moulmein appeared in the trade in this country, but the names of the collectors for long remained undisclosed. Eventually it became known that the plants had been sent home by Parish and a Colonel Benson. Many beautiful dendrobiums and the fine *Phalaenopsis Lowii* were included in the sendings. A large number of Parish's orchids were figured in the *Botanical Magazine* during the eighteen-sixties, including *Dendrobium Parishii*. His name was also commemorated in species of *Coelogyne*, *Cymbidium*, *Cypripedium*, *Phalaenopsis*, and *Vanda*, as well as in *Parishia*, a genus of *Anacardiaceae* from Malaya.

Parish contributed the account of the orchids to Mason's book on Burma, in which 350 were enumerated. Other botanical writings of his appeared in periodicals such as the *Journal of the Asiatic Society of Bengal*. He brought home, in 1871, and presented to Kew a 'beautiful collection of careful water-colour drawings, with analytical sketches,

REV. CHARLES PARISH (1822-1897)

which have proved exceedingly trustworthy,' to quote Reichenbach in his enumeration of the orchids collected in the neighbourhood of Moulmein.

In 1878 Parish retired from his missionary labours, but after his return to England continued to interest himself in orchids, and in addition turned his attention to botany generally, and to the Somerset Archaeological Society. He died at his residence, Roughmoor, Somerset, on the 18th of October, 1897.



Gardeners' Chronicle.

ISAAC ANDERSON HENRY, ESQ., F.L.S.

TO WHOM VOLUME XCVII.

IS DEDICATED

ROYAL GARDENS, KEW.
DECEMBER 1, 1871.

JOS. D. HOOKER.

ISAAC ANDERSON-HENRY

(1800-1884)

ISAAC ANDERSON was baptized at Caputh, Perthshire, on the 14th of July, 1800. He came of an old Perthshire family that held its possessions for several centuries on payment to the Crown of a white rose at midsummer. (The name Henry was a later addition necessitated by a deed of entail.) Anderson was educated for the law and practised for some years as a solicitor.

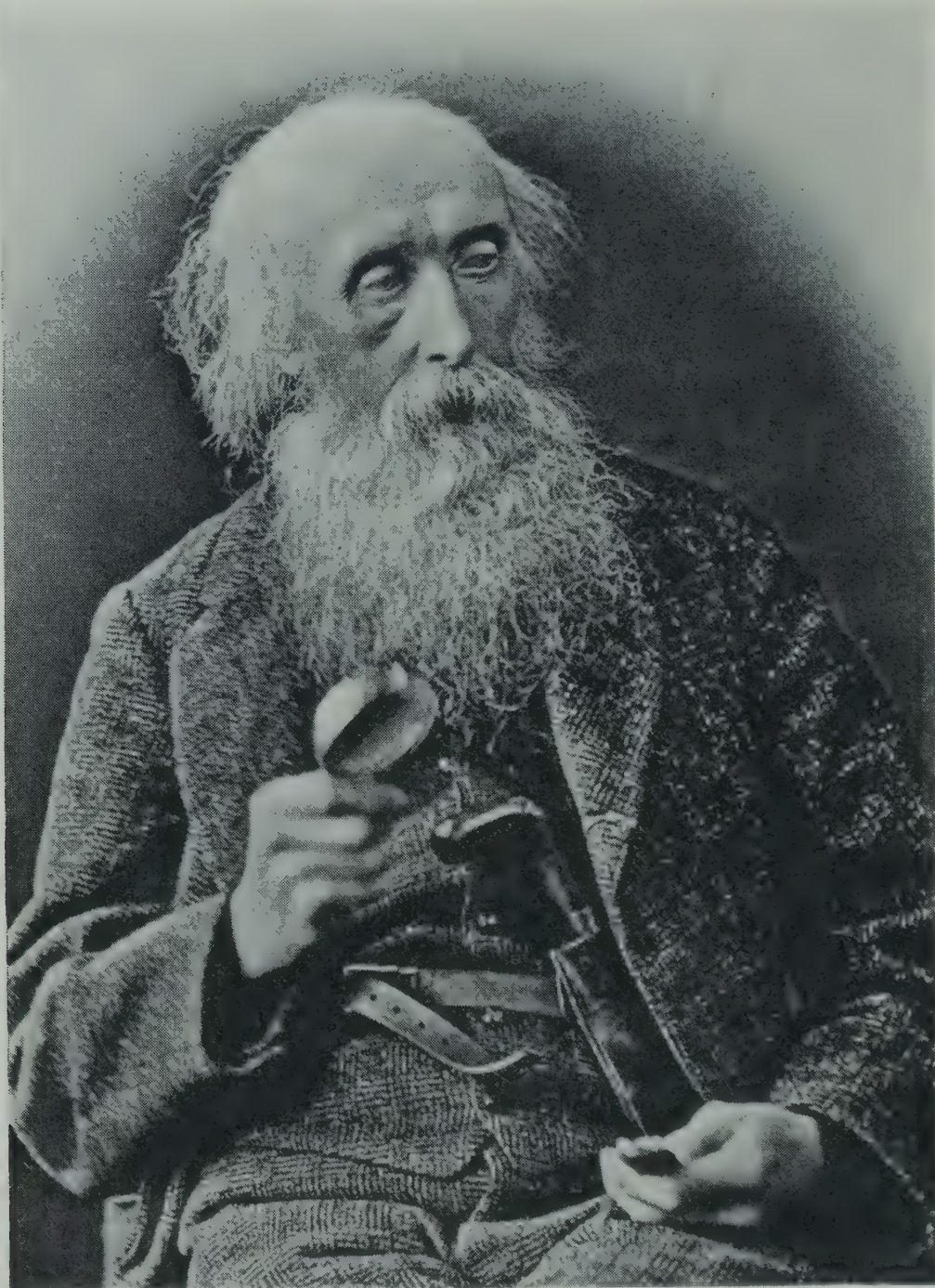
From an early age he was a keen horticulturist ; careful and systematic hybridization and the introduction and cultivation of plants from abroad (especially Andean species, Himalayan primulas, and New Zealand veronicas) being the two branches of his hobby on which he concentrated his attention. Many of the plants figured in the *Botanical Magazine* between 1860 and 1880 were introduced by him, and they include some interesting species. As a hybridist he was still more famous. He raised a race of beautiful large-flowered clematis, and with campanulas also he obtained good results.

Among the papers published by Anderson-Henry was an important one on the necessity of free access of air to the roots of plants. This necessity was forced on his notice by the appearance of roots on the stems of cuttings above the surface of water, in which he had kept them so long that an air-excluding film had gathered on the surface. Other important papers by him, chiefly on hybridization, appeared during 1867 and 1868 while he was President of the Botanical Society of Edinburgh. In one of these he gave an interesting account of his successes and disappointments, and also of his aspirations, which included the crossing of the bramble with the raspberry and the raising of a blue dahlia.

ISAAC ANDERSON-HENRY (1800-1884)

Anderson-Henry was a correspondent of Darwin and Sir Joseph Hooker and an intimate friend of John Hutton Balfour, of Edinburgh. His residence at Edinburgh was a Mecca for English and foreign botanists and horticulturists. He contributed various interesting communications to the Scientific Committee of the Royal Horticultural Society, of which, as well as of many other Societies, such as the Linnean and the Edinburgh Royal, he was an honoured Fellow.

He died in Edinburgh on the 21st of September, 1884. His health had been failing for some years, and his friends had persuaded him to spend the previous winter in the south of France.



Royal Botanic Garden, Edinburgh.

JOHN HUTTON BALFOUR, M.D., F.R.S.

PROFESSOR OF BOTANY IN THE UNIVERSITY OF EDINBURGH

TO WHOM VOLUME XCVIII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1872.

Jos. D. HOOKER.

JOHN HUTTON BALFOUR

(1808-1884)

JOHN HUTTON BALFOUR was born in Edinburgh on the 15th of September, 1808. After six years at the High School, Edinburgh, he studied at the Universities of Edinburgh and St. Andrews. His studies were at first directed with a view to his becoming a minister of the Church of Scotland, but he ultimately decided to enter the medical profession. He took his M.D. at Edinburgh in 1832 and, after further study in Continental schools, began medical practice in his native city in 1834.

While engaged in his profession he was able to devote time to botany, his early taste for which had received a great stimulus from the lectures of Professor Graham at Edinburgh. With ten others who were attracted to natural science, he founded, in 1836, the Botanical Society of Edinburgh, a body which has done much to promote the study of botany in Scotland.

In 1841 he gave up medical practice on succeeding Sir William Hooker as Professor of Botany at Glasgow University; and four years later, on the death of Professor Graham, Balfour was elected to the vacant Chair of Botany at Edinburgh, accepting in addition the posts of Regius Keeper of the Royal Botanic Garden and Queen's Botanist for Scotland. Subsequently he undertook the duties of Dean of the Medical Faculty in the University and of Secretary of the Royal Society of Edinburgh. Under his direction the Botanic Garden was greatly enlarged, and a fine palm-house and botanical museum were built. He also established an arboretum there.

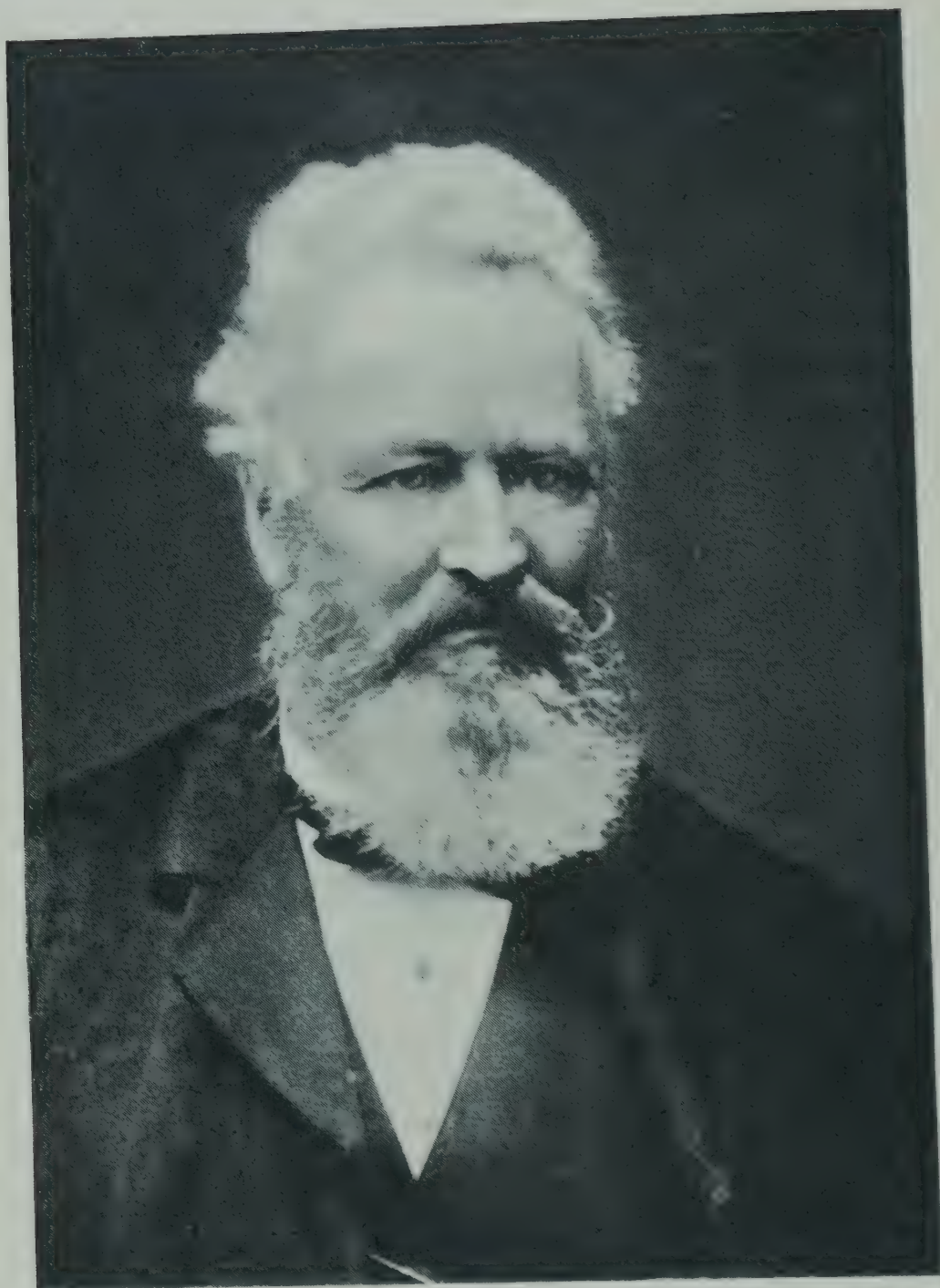
As a teacher Balfour's fame was world-wide. He had the power of lucid exposition to a pronounced degree, and the art of infusing others with his own great enthusiasm.

JOHN HUTTON BALFOUR (1808-1884)

His botanical excursions with pupils extended to all parts of Scotland : every important peak was climbed and every rarity gathered.

Balfour was the author of various botanical text-books, which went through numerous editions and included the *Manual* and the *Class Book*. The *Botanist's Companion* appeared in 1860. He was a deeply religious man, and wrote several books of a botanico-theological nature. His *Phyto-Theology* was issued in 1851 (the title was changed in the third edition to *Botany and Religion*), and *Plants of the Bible* in 1857. To the Royal Society's *Transactions* he was a frequent contributor, and for years he was one of the editors of the *Annals of Natural History* and of the *Edinburgh New Philosophical Journal*.

On Balfour's retirement from his several Edinburgh posts in 1879, the three Universities with which he had been connected conferred on him the degree of LL.D. He was elected a Fellow of the Royal Society of Edinburgh in 1835, of the Linnean Society in 1844, and of the Royal Society of London in 1856. He died at Inverleith House, Edinburgh, on the 11th of February, 1884. A genus of *Rutaceae*, *Balfourodendron*, commemorates his name.



Royal Botanic Gardens, Kew.

DAVID MOORE, PH.D., F.L.S., M.R.I.A.

SUPERINTENDENT OF THE ROYAL DUBLIN SOCIETY'S BOTANIC
GARDEN, GLASNEVIN

TO WHOM VOLUME XCIX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1873.

JOS. D. HOOKER.

DAVID MOORE

(1807-1879)

DAVID MUIR was born at Dundee on the 23rd of April, 1807, and in early life was employed in the nearby gardens of the Earl of Camperdown. He was later the Foreman of that establishment, and he spent some time at the Cunningham Nurseries at Edinburgh. In 1828 he went to Dublin as Assistant to J. T. Mackay, Director of the University Botanic Garden. He then began to spell his name Moore.

He was, in 1834, appointed to the staff of the Ordnance Survey of Ireland, which began its work on Londonderry. The first volume of its *Memoirs* was published in 1837, and to this Moore contributed an able paper on the flora of the region surveyed, the county of Antrim and a part of Londonderry.

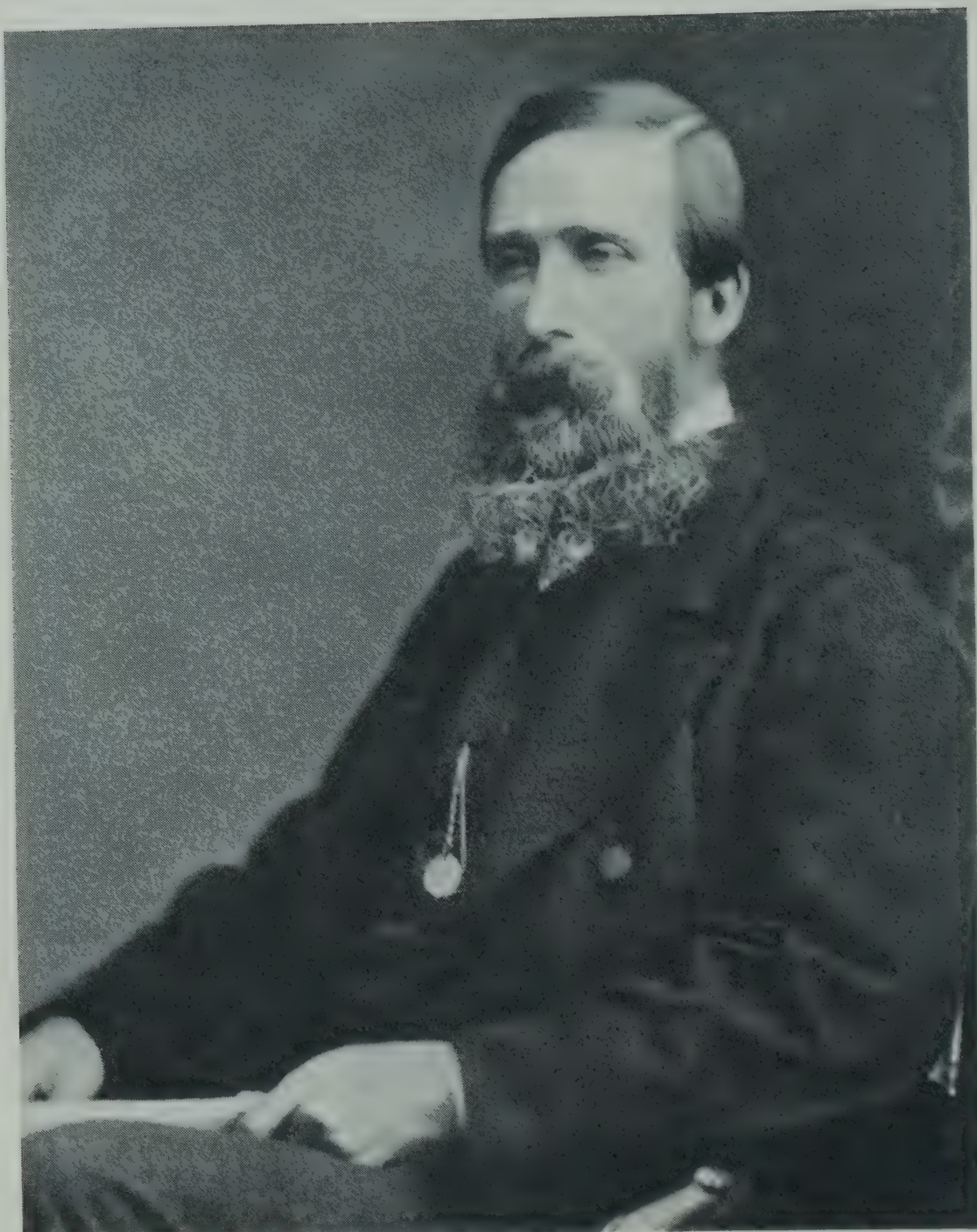
The Royal Dublin Society, in 1838, elected him to the charge of their Botanic Garden at Glasnevin. He entered on his duties with such energy and ability as to raise the garden from comparative insignificance to a position in the highest rank, enriching it in no small degree by plants of his own collecting. Norway and Sweden, Germany, France, Italy, Spain, and Russia were visited by him, whence new and rare treasures were brought to add to the Glasnevin collection. Among plants the introduction of which to cultivation is due to Moore are the Pampas Grass, named *Moorea argentea* in his honour by Lemaire in 1855, *Lilium giganteum* and *L. Wallichianum*, and several species of *Nymphaea* and *Passiflora*. He was among the first to raise orchids from seeds, and in the production of hybrids in *Sarracenia* he was a pioneer.

He gave valuable aid to Mackay in compiling his list of Irish plants, and with A. G. More he edited the *Contributions towards a Cybele Hibernica*, an account of the geographical

DAVID MOORE (1807-1879)

distribution of plants in Ireland. This was begun in 1836 and published, with the help of a grant of £25 from the British Association, in 1866. A second edition was issued in 1898. Moore also devoted a great deal of attention to cryptogams, especially the *Musci* and *Hepaticae*, and published in the *Proceedings of the Royal Irish Academy* a *Synopsis of the Mosses of Ireland*, 1873, and a *Report on Irish Hepaticae*, 1876.

The Linnean Society elected him an Associate in 1840 and a Fellow in 1861. His services to science were recognised by the University of Zurich conferring on him the degree of Ph.D. He attended the Moscow Exhibition of 1865, and represented British horticulture in Paris during the Exhibition of 1867. After forty years at Glasnevin, Dr. Moore died there on the 9th of June, 1879. He was one of a brilliant galaxy of men who were both botanists and gardeners, and who have constituted an era in natural science.



Royal Botanic Gardens, Kew.

GEORGE MAW, ESQ., F.L.S., F.G.S.

OF BENTHALL HALL, BROSELEY

TO WHOM VOLUME C.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1874.

JOS. D. HOOKER.

GEORGE MAW

(1832-1912)

GEORGE MAW was born in London on the 10th of December, 1832. He most probably received instruction in his early years from his father, a man of culture and learning, and later on he spent some time at the Agricultural College at Cirencester with the idea of becoming a farmer. Though successful in these studies he changed his plans, and in 1850 joined a younger brother in establishing an artistic tile factory at Worcester. Two years later the business was removed to Broseley, Shropshire, where Maw began to fill his garden with a remarkable collection of hardy plants.

A man of wide scientific interests, he gained considerable reputation in chemistry, geology, and botany. He first turned his attention to British botany, becoming especially interested in the plants of Devonshire. *Lilium pyrenaicum*, in a naturalised condition, was discovered by him near Molton. To enrich his garden he travelled extensively in the mountainous regions of Europe, Asia Minor, and North Africa. He brought back *Draba Mawii* from the Sierra Nevada, Spain, and discovered *Saxifraga Mawii* on a mountain above Tetuan. In 1871 he accompanied J. D. Hooker and John Ball on an expedition to North Africa to investigate the flora of the Great Atlas. Maw contributed an account of the geology of the country traversed as an appendix to the *Journal of a Tour in Morocco and the Great Atlas*, by Hooker and Ball, which was published in 1878.

He began to concentrate his attention on the genus *Crocus* about 1875, and spent a long time in Greece and Asia Minor studying and collecting these beautiful plants in their native localities. His study of the genus was continued in his garden at Broseley, where he succeeded in growing nearly all the sixty-seven species recognised by him. After many

GEORGE MAW (1832-1912)

preliminary articles in the *Gardeners' Chronicle* between 1877 and 1881, and a paper contributed to volume xix., 1882, of the *Journal of the Linnean Society*, he published, in 1886, his magnificent *Monograph of the Genus Crocus*, containing quarto plates of the sixty-seven species drawn and coloured by himself. Living plants of most of the species were presented to Kew, where Maw planted them with his own hands.

The Linnean Society elected him a Fellow in 1860, and he was also a Fellow of the Geological Society and of the Society of Antiquaries.

He left Broseley in 1886 and died at Kenley, Surrey, on the 7th of February, 1912.



Royal Botanic Gardens, Kew.

MAXWELL T. MASTERS, M.D., F.R.S., F.L.S.

TO WHOM VOLUME CI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1875.

Jos. D. HOOKER.

MAXWELL TYLDEN MASTERS

(1833-1907)

MAXWELL TYLDEN MASTERS, son of a Canterbury nurseryman, was born in that city on the 15th of April, 1833. He was educated at King's College, London, and at the University of St. Andrews, where he took his M.D. After leaving college he was appointed Sub-Curator of the Fielding Herbarium at Oxford. During 1856 he practised his profession at Peckham, and it was in that year that he turned his attention to plant teratology, a subject on which he afterwards became a great authority. From 1855 to 1868 he was Lecturer in Botany at St. George's Hospital. He was also for some years Examiner in Botany to the University of London, for the Society of Apothecaries, and for the Civil Service. In 1860 he was elected a Fellow of the Linnean Society.

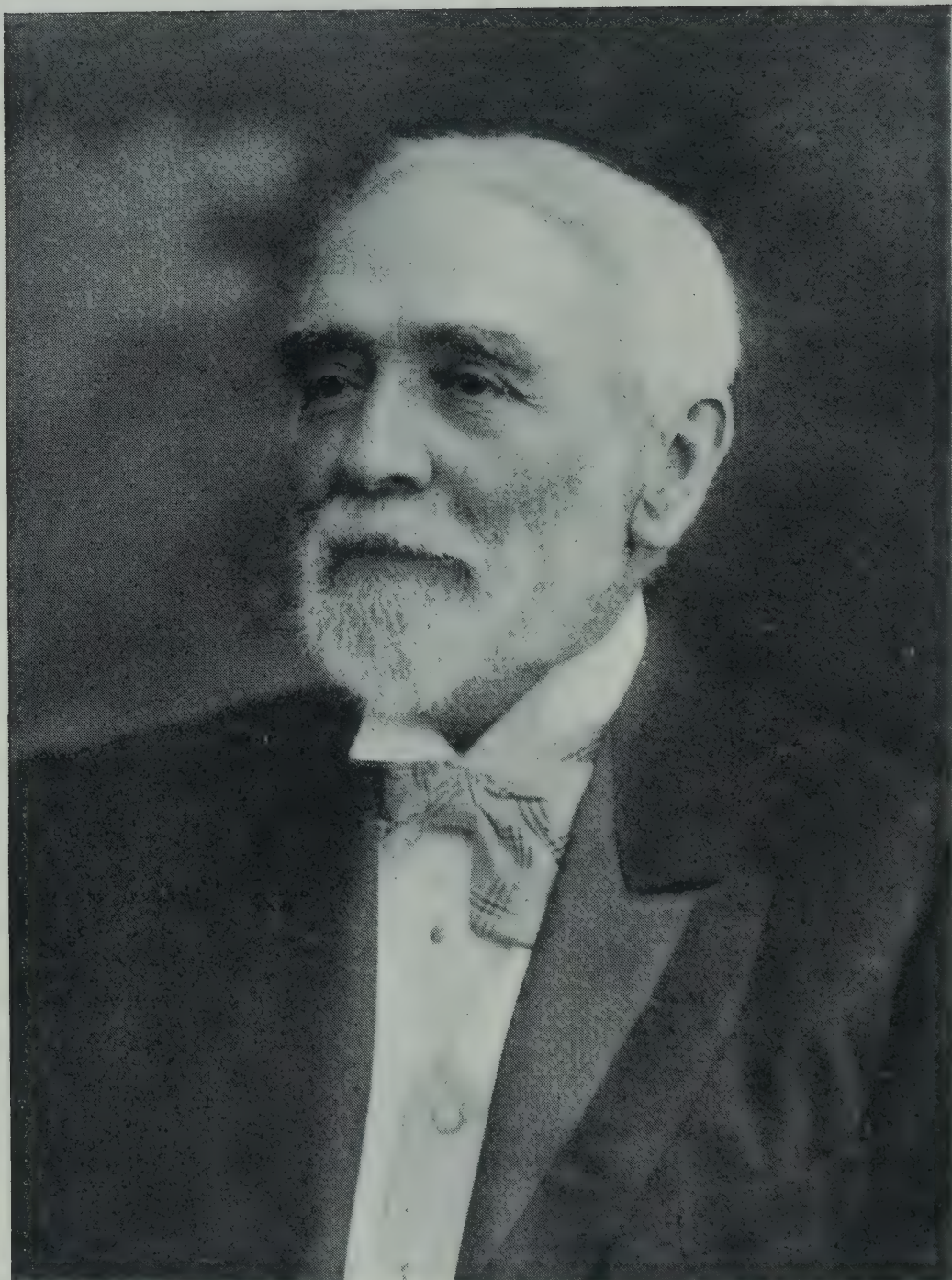
He contributed many papers to the *Transactions and Journal* of that Society, including important memoirs on *Passifloraceae* and *Coniferae*. These families, with *Malvaceae*, *Aristolochiaceae*, *Nepenthaceae*, and *Restiaceae*, were his special favourites. He elaborated several of them for the *Flora of Tropical Africa* and the *Flora of British India*. His volume, *Vegetable Teratology*, appeared in 1869 and ran to more than 500 pages. His principal literary undertaking was the editorship of the *Gardeners' Chronicle*, which he shared with Thomas Moore from 1865 to 1887, when Moore died. Thereafter, until a month before he himself passed away, Masters had sole direction of that journal. He kept it high amongst its contemporaries, it being the only one to represent adequately the scientific side of horticulture. Contributions from botanist friends, such as J. G. Baker and W. B. Hemsley, appeared frequently in the *Chronicle*. He was an indefatigable worker, as is shown

MAXWELL TYLDEN MASTERS (1833-1907)

by the fact that, though he interested himself very much in horticultural affairs, he yet had time to write a great many scientific papers.

He was elected to the Royal Society in 1870, and received many other distinctions at home and abroad. Chief among the latter was that of Corresponding Member of the Institute of France. For many years before his death he was Vice-Chairman of the Scientific Committee of the Royal Horticultural Society. His name is commemorated in the plant genera *Maxwellia* and *Mastersia*.

Dr. Masters was a kind friend to the young aspirant, and many notable figures in botany and horticulture 'made their bow' in the pages of his *Chronicle*. His gentle manner gave a suggestion of timidity, and he had a natural aversion to anything savouring of controversy. He died at Ealing, Middlesex, on the 30th of May, 1907. He declined the V.M.H. from the Royal Horticultural Society, remarking that he was unworthy of so Very Much Honour, an action characteristic of the man. In 1909 the Royal Horticultural Society instituted an endowment fund to establish annual lectures, the Masters Memorial Lectures, in commemoration of his services to the Society.



Courtesy of Mrs. Cecil Grant.

MR. WILLIAM THOMPSON

OF IPSWICH

TO WHOM VOLUME CII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1876.

JOSEPH D. HOOKER.

WILLIAM THOMPSON

(1823-1903)

WILLIAM THOMPSON was born at Ipswich on the 18th of May, 1823. The study of science, particularly chemistry, attracted him from an early age. Photography, too, claimed his attention, and he was one of the pioneers of the old daguerreotype method of photography. This hobby caused him to travel extensively. Some of his photographs of old Ipswich were reproduced in archaeological and other publications.

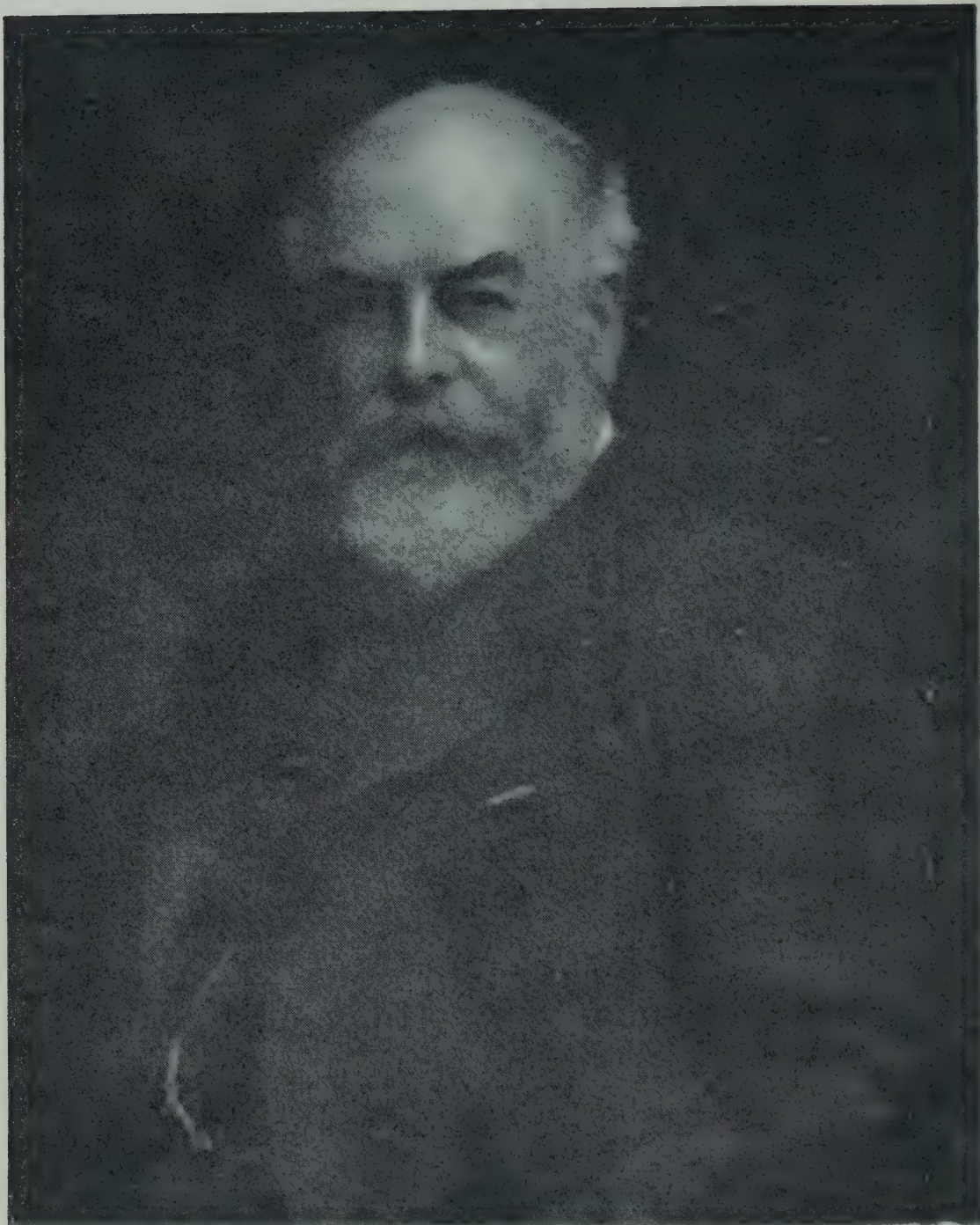
During a period of ill-health he became interested in botany and in the cultivation of plants. He soon began to exchange and sell the seeds of rare species, and started at his home in Ipswich a small garden which had grown to three large nurseries at the time of his death. In 1855 appeared his first catalogue. He specialized in herbaceous and alpine plants, and many fine species were introduced to cultivation in this country by him, especially from the western United States. His first noteworthy introduction was the beautiful *Rhodanthe Manglesii* var. *maculata*, from Swan River, Western Australia, in 1861. This became a great favourite in decorative work. Two other fine varieties of *R. Manglesii*—*alba* and *atrosanguinea*—were brought to the notice of horticulturists by Thompson during the same year. Perhaps his most notable discovery was *Aquilegia caerulea* which, crossed with *A. chrysantha*, gave birth to the race of beautiful, long-spurred columbines which afterwards became so popular. In 1870 he reintroduced *Godetia Whitneyi* and gave to English gardens for the first time *Leptosiphon roseus*. He distributed the charming *Phacelia campanularia*, like the two foregoing species a Californian plant, in 1882, having flowered it for the first time in England two years before. His gardens were visited by botanists and horti-

WILLIAM THOMPSON (1823-1903)

culturists from all over the world, and he counted Charles Darwin and Asa Gray among his friends.

In 1852 Thompson founded a monthly journal, the *English Flower Garden*, illustrated by fine coloured reproductions from hand paintings by Fitch, but with the first number of the third volume the venture was abandoned. His *Gardening Book of Annuals* was published in 1855, and a supplement appeared in the following year. An improved edition was issued some years later. He also contributed to the *Treasury of Botany*.

Thompson was a man of wide reading and a good linguist. The Royal Horticultural Society awarded him the Victoria Medal of Honour in 1897, and thus he was one of the original recipients of this honour. His wife died in 1884 and he at Ipswich on the 3rd of July, 1903. Three daughters and a son survived him.



Royal Botanic Gardens, Kew.

HENRY JOHN ELWES, ESQ., F.L.S., F.Z.S.

OF PRESTON HOUSE, CIRENCESTER

TO WHOM VOLUME CIII.

IS DEDICATED

JOSEPH D. HOOKER.

HENRY JOHN ELWES

(1846-1922)

HENRY JOHN ELWES, the son of a wealthy landowner, was born on the 16th of May, 1846. After Eton he studied French at Brussels and German at Dresden. Five years were spent in the Scots Guards, and then, resigning his captaincy, he began a long life of travel and adventure, which resulted in a rich addition to the existing knowledge of ornithology, entomology, and botany, and the advancement of gardening and forestry. He visited every country in Europe and also made journeys in North Africa, Asia Minor, Tibet, India, Siberia, China, Japan, North America, Mexico, and Chile.

Elwes discovered many new and beautiful plants on his expeditions. Among his gatherings from Asia Minor, in 1874, were six new species of *Crocus* and that fine snowdrop, *Galanthus Elwesii*. He reintroduced *Nothofagus obliqua* and *N. antarctica* in 1902.

The published work of Elwes is considerable, sound, and varied. His first paper, *The Bird Stations of the Outer Hebrides*, appeared in the *Ibis* in 1869, and this was followed four years later by his most important contribution to ornithology, *On the Geographical Distribution of Asiatic Birds*. In 1877-80 came his great monograph on the genus *Lilium*. With Professor A. Henry as collaborator he began, about 1903, the preliminary labours in the production of that monumental seven-volume work, *The Trees of Great Britain and Ireland*. The first volume was issued in 1906 and the last in 1913. During his Presidency of the Royal English Arboricultural Society he founded the *Quarterly Journal of Forestry*, 1907. His interesting *Memoirs* were published in 1930.

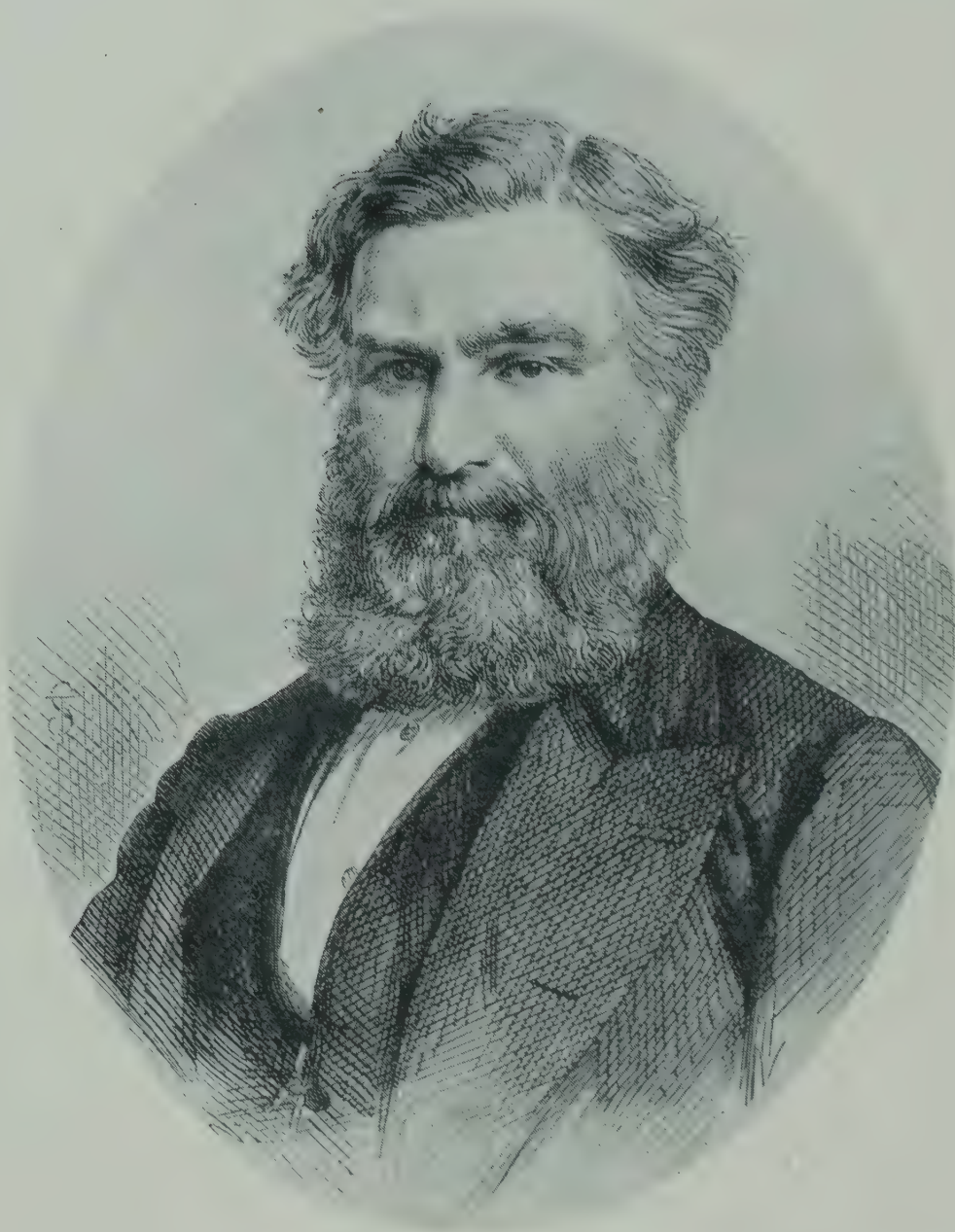
From 1875 until his death Elwes was intimately

HENRY JOHN ELWES (1846-1922)

associated with the *Botanical Magazine*. After the War this venerable journal was threatened with extinction, and it was largely owing to his generosity that a sufficient sum was raised to buy the copyright and the old stock for the Royal Horticultural Society. He was proud of the fact that as many as a hundred of his plants were figured in the *Magazine*. Many of these were new introductions and became garden favourites. He gave £1,000 towards the building of the Horticultural Hall, Vincent Square.

Elwes was the recipient of many honours. He was for a time President of the Royal English Arboricultural Society, and of the Entomological Society; Vice-President of the Royal Horticultural Society, and one of its original Victoria Medallists (1897). The British Ornithological Union, of which he had been a member for fifty-five years, elected him President in 1921, and he became a Fellow of the Royal Society in 1897.

At Colesborne, in the Cotswolds, Elwes had remarkable collections of butterflies, big game trophies, and timbers. He had a very retentive memory and was always greedy for knowledge. His writings are characterised by vigour of style, and though apt to be over-emphatic are rarely inaccurate. Self-assertiveness caused him to be misunderstood, but those who knew him best testified to his charm of character and the loveliness of his nature. He passed away at Colesborne, Gloucestershire, on the 26th of November, 1922.



Gardeners' Chronicle.

ROBERT HOGG, ESQ., LL.D., F.L.S.

SECRETARY OF THE ROYAL HORTICULTURAL SOCIETY

TO WHOM VOLUME CIV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1878.

J. D. HOOKER.

ROBERT HOGG

(1818-1897)

ROBERT HOGG was born at Coldstream, Berwickshire, in 1818. He was educated for the medical profession, but an early love for natural science led to his concentrating on the study of botany as a means of attaining distinction.

After studying at Edinburgh University he gained a practical knowledge of horticulture at the establishment of Peter Lawson & Sons of that city, and later at that of Dr. Ronalds at Brentford. Ronalds was engaged on the preparation of his book, *Pyrus Malus Brentfordiensis*, and, while at Brentford, Hogg acquired that taste for pomology which developed into a life-long devotion. At Rouen and Paris he completed his botanical studies under Adrien de Jussieu, Mirbel, and others at the Jardin des Plantes.

He decided that pure science was not likely to prove so remunerative to him as the pursuit of practical horticulture, and in 1845 he joined the management of the Brompton Park Nursery. This was a large fruit nursery extending from Brompton Church almost to Gloucester Road, and from Kensington Road to Brompton, and including the former site of the Garden of the Horticultural Society. It was founded in 1681. Hogg found the fortunes of the once celebrated nursery declining, and after a few years he retired.

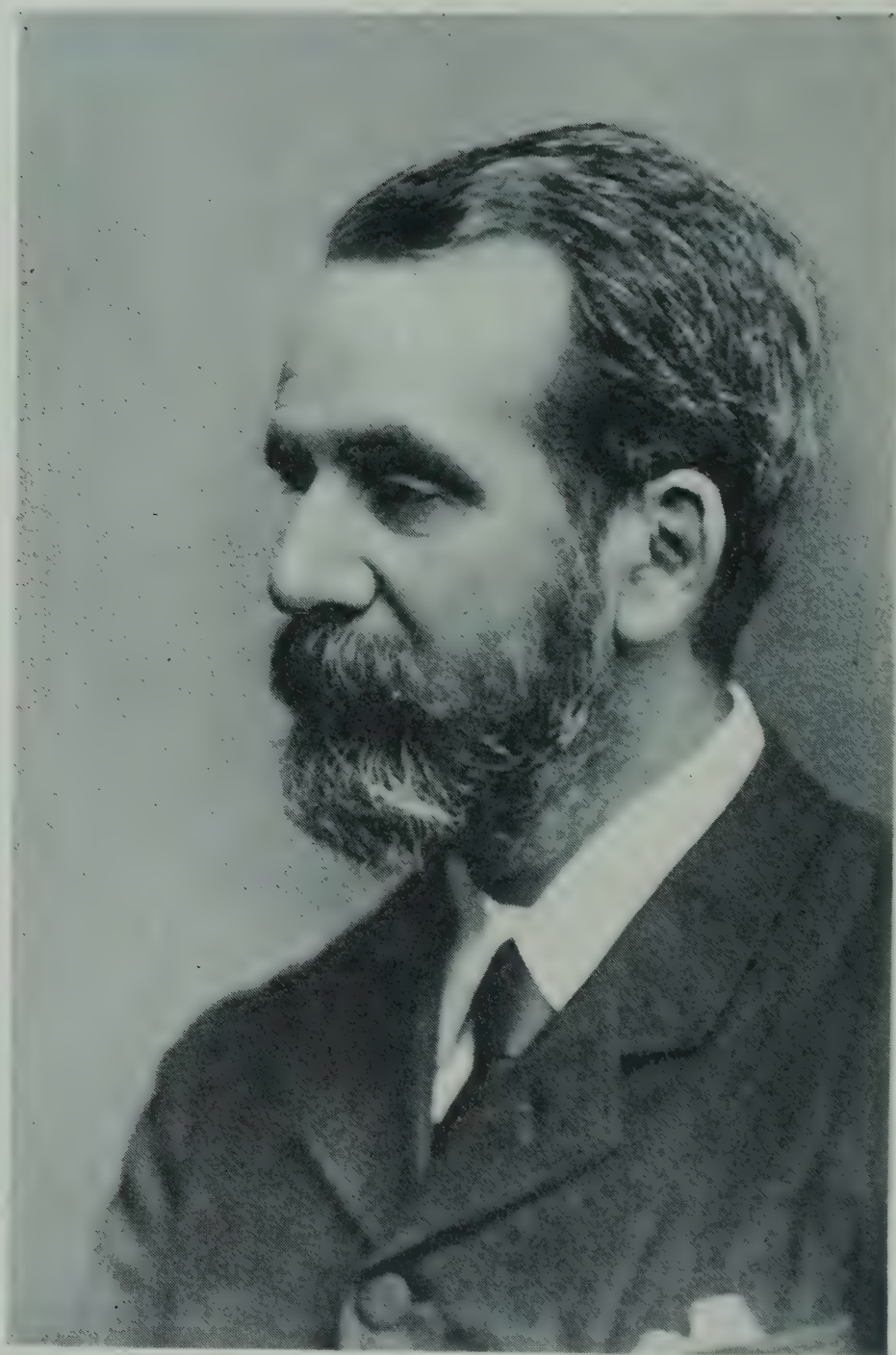
About 1844 he began a work entitled *British Pomology*, but only one part appeared. The cultivation of fruit was not in fashion at the time, and no bookseller could be found willing to undertake publication. Hogg was not unduly discouraged by this failure, and he took part in forming the British Pomological Society in 1854, with Sir Joseph Paxton as its first President. This was merged in the Fruit Committee of the Horticultural Society in 1858. He later became Secretary to this Committee and took an active

ROBERT HOGG (1818-1897)

share in the management of the Royal Horticultural Society's Garden at Chiswick, superintending the selection of the varieties for the replanting of the fruit garden. The *Fruit Manual*, which appeared in 1860, was the most important of his independent publications. The fifth, and last, edition of this was issued in 1884. For many years, in association with G. W. Johnson, he edited the *Journal of Horticulture*, and he was editor of the *Gardener's Year-book* for nearly as long. He and Johnson collaborated also in the production of the *Wild Flowers of Great Britain*, an illustrated work of eleven volumes, published in 1863-80.

With the International Horticultural Exhibition and Botanical Congress of 1866 in London he was honourably associated, and he remained to the end of his life one of the Trustees of the Lindley Library, that tangible memorial of the Congress. He appears to have received the LL.D. degree about 1860.

Dr. Hogg was elected a Fellow of the Linnean Society in 1861. His death took place at Pimlico, London, on the 14th of March, 1897.



Royal Botanic Gardens, Kew.

GEORGE KING, ESQ., M.B., F.L.S.

SUPERINTENDENT OF THE ROYAL BOTANICAL GARDENS, CALCUTTA

TO WHOM VOLUME CV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1879.

J. D. HOOKER.

GEORGE KING

(1840-1909)

GEORGE KING was born at Peterhead, Aberdeenshire, on the 12th of April, 1840. He was educated at Aberdeen Grammar School and at the University, where he graduated with honours in medicine in 1865. In October of that year he joined the Indian Medical Service, being posted to the Bengal Presidency.

Botany had been his favourite study at Aberdeen, and it claimed his leisure while at the Medical College Hospital in Calcutta and on medical duty in Central India. Appointed to the Chair of Botany at the Calcutta Medical College in 1871 he also became, about the same time, Superintendent of the Royal Botanic Garden, Calcutta, and of Cinchona Cultivation in Bengal. To his duties were added, in 1891, those of Director of the Botanical Survey of India, a post just created. These undertakings formed a severe test through which he passed with complete success. Two cyclones in the eighteen-sixties had reduced the Calcutta Garden to a state necessitating complete remodelling. King's energy and architectural skill had full scope, and in a few years the place was transformed. The Cinchona Department was so developed that this remedy against malaria was brought within reach of the poorest people of India.

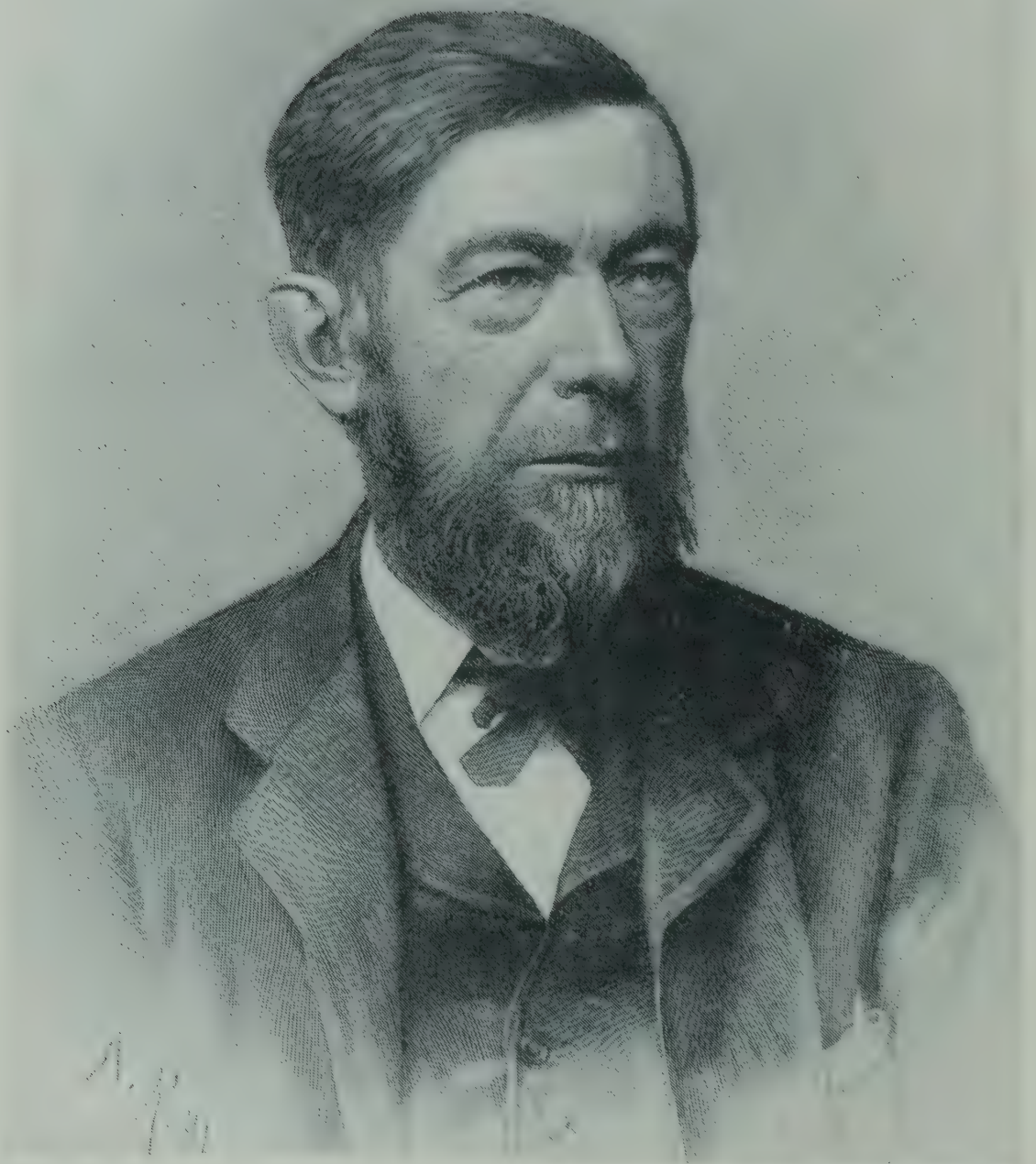
When in 1887 the gardens and plantations had reached a flourishing state, King began the publication of important botanical work. He founded, and became chief contributor to, the *Annals of the Royal Botanic Garden, Calcutta*. The first volume was devoted to a monograph of the eastern species of *Ficus*, and work on such other important genera as *Artocarpus*, *Quercus*, *Castanopsis*, and *Myristica* appeared in succeeding volumes. Concurrently with the *Annals* King published his *Materials for a Flora of the Malayan Peninsula*,

GEORGE KING (1840-1909)

prepared with as much care as would usually be given to a more finished work. This was completed to the middle of the *Calyciflorae* before he retired from India, after thirty-three years' service, in 1898.

After his retirement he began to work out the dicotyledonous families for the *Materials*, while Mr. H. N. Ridley, Director of the Botanic Garden, Singapore, undertook the elaboration of the monocotyledons. In working at the *Corolliflorae*, he became associated with Mr. J. S. Gamble, who later, consequent on King's failing health, continued the task alone.

In recognition of his skill as a landscape gardener the Royal Horticultural Society awarded him the Victoria Medal of Honour in 1901. His work on cinchona secured for him, in 1890, the Companionship of the Order of the Indian Empire, and he was created K.C.I.E. in 1898. He became a Fellow of the Royal Society in 1887. The Linnean Society, to which he was elected a Fellow in 1870, awarded him the Linnean Medal in 1901. His charm of manner, rich store of knowledge, and wide interests brought Sir George King many friends. He died at San Remo on the 12th of February, 1909. Several generic plant names were given in his honour, including *Kingiella*, a genus of orchids, and *Indokingia*, a Seychelles genus of *Araliaceae*.



Royal Botanic Gardens, Kew.

JOHN GILBERT BAKER, ESQ., F.R.S., F.L.S.

FIRST ASSISTANT IN THE HERBARIUM OF THE ROYAL GARDENS, KEW

TO WHOM VOLUME CVI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1880.

JOS. D. HOOKER.

JOHN GILBERT BAKER

(1834-1920)

JOHN GILBERT BAKER was born at Guisborough, Yorkshire, on the 13th of January, 1834. His education was gained at Quaker schools at Ackworth and York. When only twelve he began to collect plants, and became curator of a school herbarium in the following year.

His first important botanical work, *A Supplement to Baines's Flora of Yorkshire*, was published when he was twenty, and his interest in the botany of his native county was further shown by his acting as editor and distributor for the Thirsk Botanical Exchange Club, founded in 1859. His herbarium and library were destroyed by fire in 1864, but the loss was to some extent made good by members of the Club. The *Naturalist* published his *Review of British Roses* in 1864, and in the following year *A Monograph of British Mints* by him appeared in Seemann's *Journal of Botany*.

In 1866 he became First Assistant in the Kew Herbarium, from which post he was promoted to that of Keeper in 1890, when he succeeded Daniel Oliver; and this he held until retirement came in 1899. This long period of public service Baker crowded with botanical activity. His first task at Kew was the completion of Sir W. Hooker's *Synopsis Filicum*, 1868, of which Baker prepared a second edition in 1874. His *Flora of Mauritius and the Seychelles* appeared in 1877, and he published a *Handbook of the Fern Allies* in 1887. Among his other notable works are three handbooks: *Amaryllideae*, 1888, *Bromeliaceae*, 1889, and *Irideae*, 1892. The *Liliaceae* were dealt with in volumes xi.-xviii. of the *Journal of the Linnean Society*, 1871-81. The sixth volume of the *Flora Capensis* was entirely Baker's work, as was also the seventeenth volume of *Hooker's Icones Plantarum*, devoted to ferns and comprising a hundred species. Meanwhile he

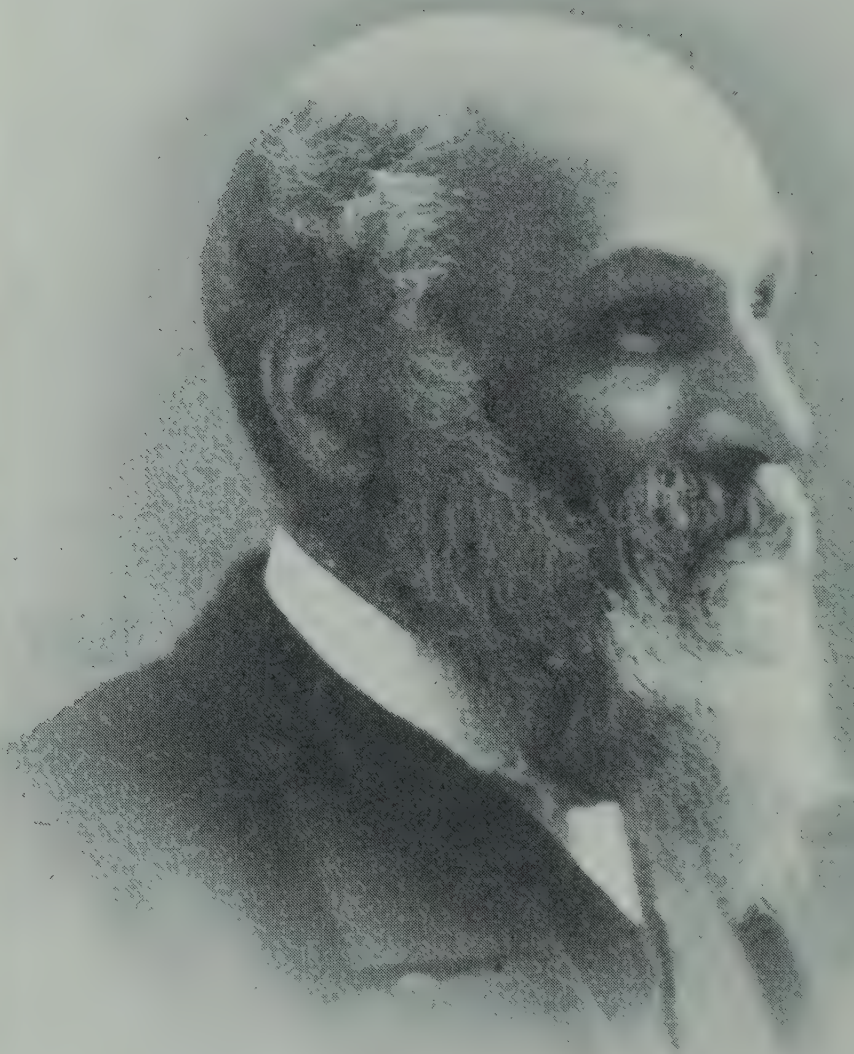
JOHN GILBERT BAKER (1834-1920)

maintained an interest in British botany by a study of the genus *Rosa*, on which he published many papers. His chief work on roses appeared during his retirement, in connection with Miss Willmott's *The Genus Rosa*, of which he was responsible for the introduction and technical descriptions.

Baker not only contributed largely to the *Botanical Magazine* but was of great general help to the editor, Sir Joseph Hooker, in its production.

In 1866 Baker was elected a Fellow of the Linnean Society, and he was awarded the Linnean Medal in 1899. He became a Fellow of the Royal Society in 1878. Many other honours were bestowed upon him by learned societies at home and abroad. He was among the earliest recipients of the Victoria Medal of Honour from the Royal Horticultural Society in 1897. Just a year before his death the University of Leeds conferred on him the honorary degree of D.Sc.

Though botany claimed a large share of Baker's life, he had many other interests which cannot claim space here. His main concern, outside his chief love, seemed to lie in helping others. In confirmation, the tribute of one who knew him well, James Britten, sometime editor of the *Journal of Botany*, may be given: 'No kinder man could ever have lived.' His death took place at Kew on the 16th of August, 1920. Two genera of plants were named *Bakeria* in his honour, and he is also commemorated in the genera *Bakerella* and *Neobakeria*.



Royal Botanic Gardens, Kew.

THE REV. H. N. ELLACOMBE, M.A.

BITTON VICARAGE

TO WHOM VOLUME CVII.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1881.

JOS. D. HOOKER.

REV. HENRY NICHOLSON ELLACOMBE

(1822-1916)

HENRY NICHOLSON ELLACOMBE was born at Bitton, in Gloucestershire, on the 18th of February, 1822. From the Grammar School at Bath he went up, in 1840, to Oriel College, Oxford, where he graduated in 1844.

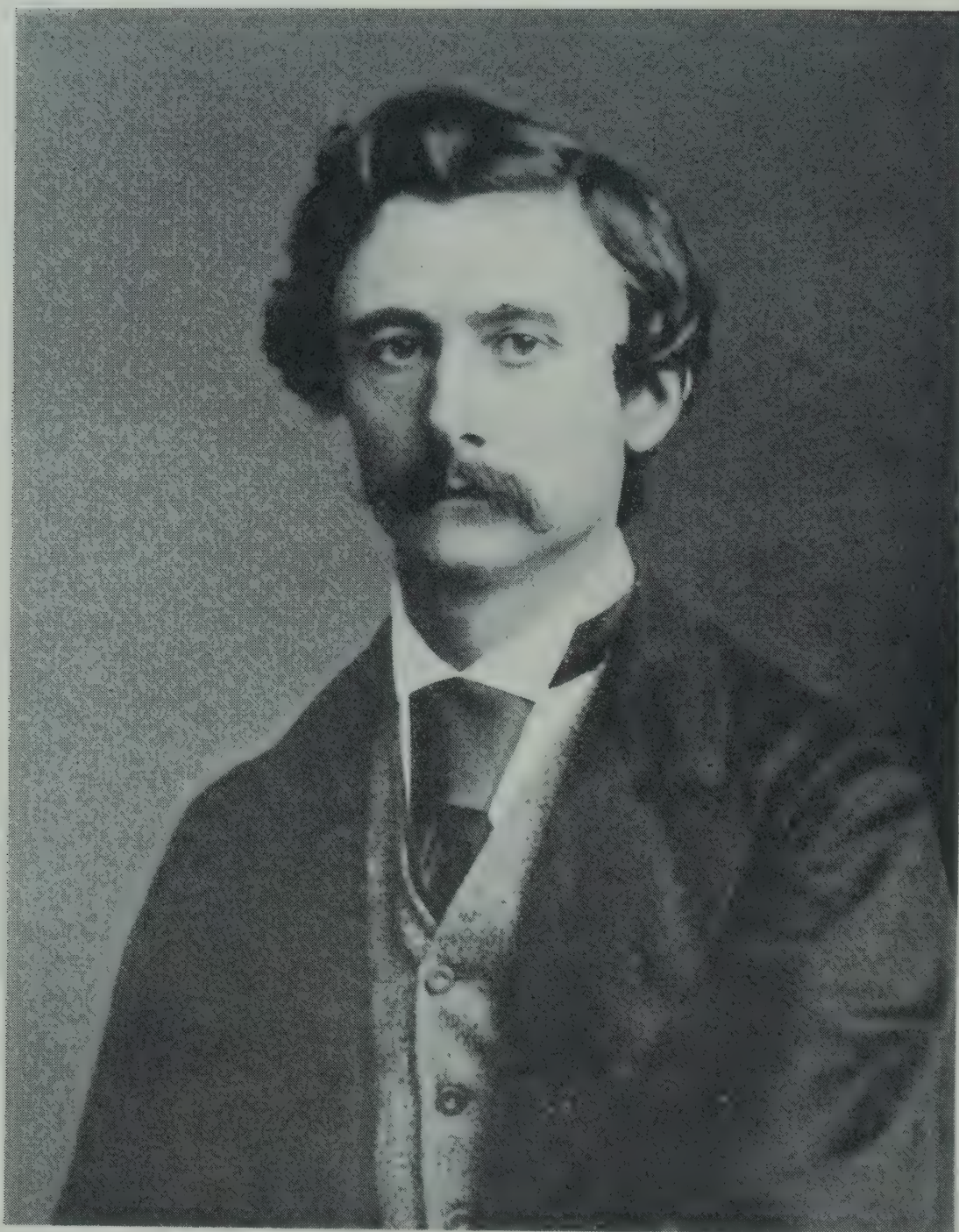
Three years later he was ordained and licensed to the curacy of Sudbury, Derbyshire. In 1848 he took his M.A. and returned to Bitton to act as curate to his father until he succeeded him as vicar in 1850. As Vicar of Bitton, Ellacombe interested himself deeply in the welfare of his people. Early in 1851 he addressed a long letter to the 'landowners and inhabitants of Bitton' asking for their assistance in providing better education for the poor children of the parish. His interest in educational reform remained strong to the end. Another task which engrossed his attention was the restoration of Bitton Church. In 1874 he was made Rural Dean of Bitton, and in 1881 Honorary Canon of Bristol.

Apart from his ecclesiastical duties Ellacombe's strongest affections were bestowed upon his garden. This had been left well stocked by his father, and its coming into the care of the younger man seemed to arouse in him that love for plants which afterwards became so strong. Fortunately the soil and climate of Bitton are both highly favourable for the successful cultivation of many exotics. It has been stated that within the compass of that half-acre garden there was a greater variety of plants than has ever been grown under similar conditions elsewhere. This in spite of the fact that all lime-hating plants were excluded owing to the calcareous nature of the soil. How generous Ellacombe was with his plants! A friend of his has said that 'his favourite doctrine was that a true gardener is known by the pleasure he takes

REV. H. NICHOLSON ELLACOMBE (1822-1916)

in giving plants to his friends,' and he added, 'judged by that standard, he was a prince among gardeners.' About a score of plates in the *Botanical Magazine* were prepared from plants grown in the garden at Bitton Vicarage. He corresponded and exchanged plants with Kew for a very long period. He was one of the original sixty Victorian Medallists of 1897.

Canon Ellacombe was an excellent classical scholar, and his book, *The Plant-Lore and Garden-Craft of Shakespeare*, reprinted from the *Garden*, in 1878, is full of classical, botanical, and literary references to the plants mentioned by the great poet. The work ran to three editions. It was followed by *Shakespeare as an Angler*, published privately in 1883. The two other books from his pen are *In a Gloucestershire Garden*, published in 1895, and *In my Vicarage Garden and Elsewhere*, in 1902. Both of these had appeared earlier in the pages of the *Guardian*. Numerous other papers were contributed to various journals. At Bitton, on the 7th of February, 1916, he passed away. A Lych Gate was erected to his memory at Bitton Church in 1931 by his friends and admirers.



Courtesy of Colonel Arthur Henty.

TO THE MEMORY OF THE LATE
GEORGE JOAD, ESQ., F.L.S. AND Z.S.
OF OAKFIELD, WIMBLEDON, SURREY

VOLUME CVIII.
IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1882.

J. D. HOOKER.

GEORGE JOAD

(1837-1881)

GEORGE CURLING JOAD was born at Walmer, Kent, on the 30th of November, 1837. He was educated privately by the Rev. E. Tew at Patching, near Worthing, Sussex.

When about twenty-two he married Laura Catherine, daughter of Edwin Henty, Esq., J.P., of Ferring, Worthing, and for fifteen years Mr. and Mrs. Joad lived at Patching, and then they moved to Oakfield, Wimbledon, where they resided until Joad's death.

He and his wife were both very enthusiastic and very good croquet players. In 1869 Joad won the Open Championship and Mrs. Joad was first in the Ladies' Championship.

Besides croquet he was interested in travel, natural history, botany, and gardening; and probably these pursuits attracted him chronologically somewhat in the order in which they are given.

With his wife he travelled in Egypt and South Africa, and alone he paid a visit to the West Indies. On these trips he collected butterflies and moths and, from the West Indies, plumage birds in great variety.

The alpine flora seems next to have claimed his attention, as he spent many seasons collecting plants in Switzerland and other parts of south and central Europe. Many of these were dried, and with others formed a large collection which, after his death, went to Kew. This is described in the Kew Report for 1881 as a 'very splendid and munificent gift.' It is added that Joad 'spared neither expense nor trouble upon the specimens, which were mostly of great beauty and in the best possible state of preservation.'

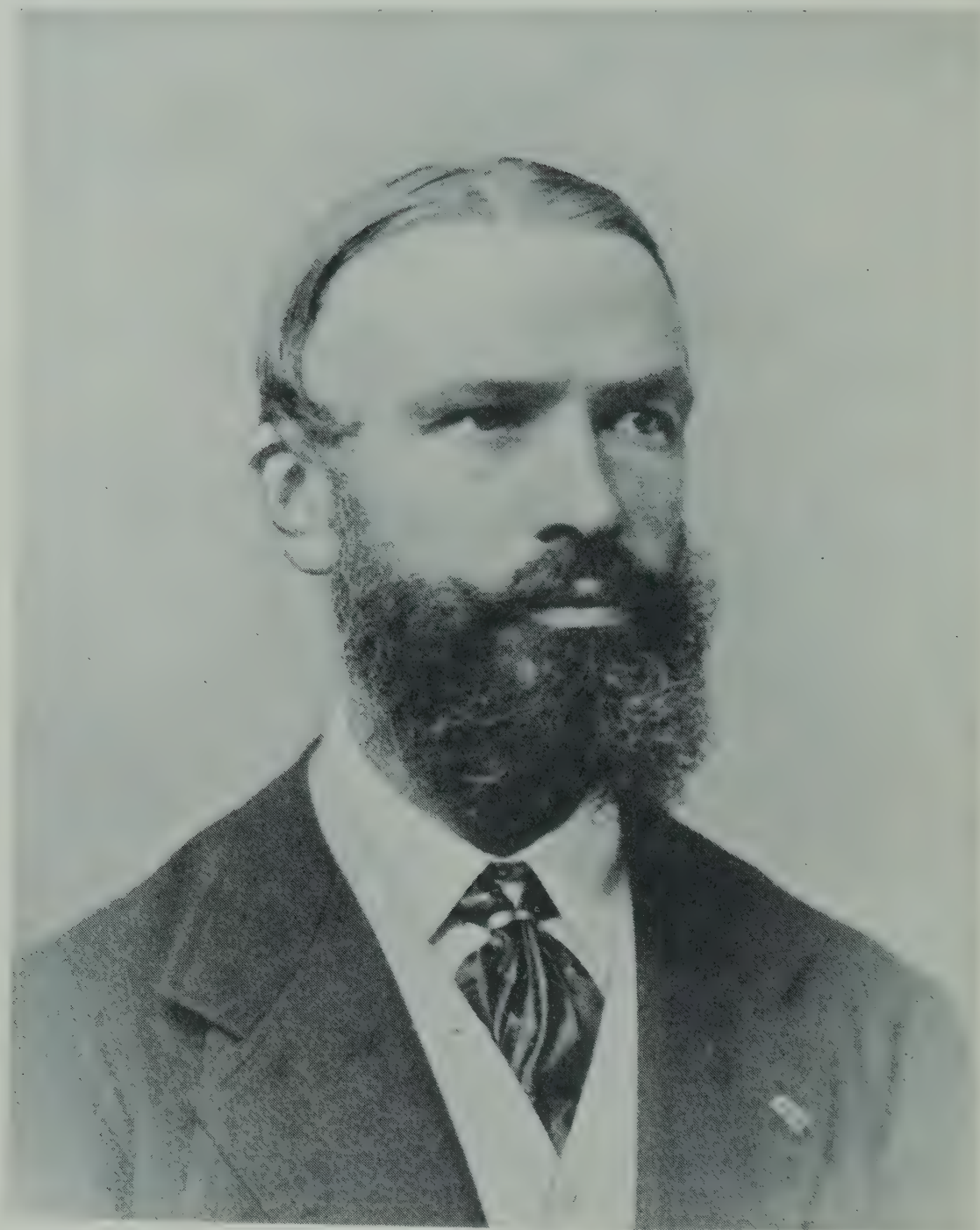
Meanwhile, at Oakfield, Joad was becoming an ardent cultivator, giving particular attention to alpine and her-

GEORGE JOAD (1837-1881)

baceous plants. He had two rock gardens constructed, and was among the first to cultivate alpine on a large scale in this country. The whole collection was bequeathed to Kew, whither nearly three thousand plants, many of them rare and beautiful species, were removed after Joad's death. To accommodate them the Kew rock garden had to be entirely rebuilt, and for this task a government grant of £500 was obtained. Only about a year previously a number of persons interested in this branch of horticulture had petitioned Parliament to have a rock garden constructed at Kew which would be worthy of the establishment.

Joad was a friend of Sir Joseph Hooker, the Kew Director, and the two corresponded and exchanged plants for some years. One plant in the Wimbledon collection, a beautiful cactus from Uruguay, flowered five years after its owner's death, and Hooker, considering it to be a new species of *Echinocactus*, described and figured it in the *Botanical Magazine* as *E. joadii*.

For some time Joad served on the Scientific Committee of the Royal Horticultural Society, and he was elected a Fellow of the Linnean Society in 1871. He was also a Fellow of the Zoological Society. His health became very delicate and he spent his winters at Mentone. He died at Oakfield on the 24th of October, 1881.



Royal Botanic Gardens, Kew.

HERR MAX LEICHTLIN

BADEN BADEN

TO WHOM VOLUME CIX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1883.

J. D. HOOKER.

MAX LEICHTLIN

(1831-1910)

MAX LEICHTLIN was born in Karlsruhe, Germany, on the 20th of October, 1831. He was educated at the Academy and at the Polytechnic School, and in 1846 entered the Karlsruhe Botanical Gardens as a student.

Employment as a gardener at Frankfurt-am-Main, Bollweiler, and Ghent, and later in the Royal School of Gardening at Potsdam, gave him a sound knowledge of the cultivation of plants.

For some years previous to 1856 he travelled extensively through Europe, spending a considerable time in England, and also undertook a botanical expedition to Brazil and the Argentine. After his return in 1856 he spent a few months in Dublin, and then accepted a post with the nursery firm of Van Houtte at Ghent, where he stayed for two years.

Following family bereavement he abandoned his profession and entered his father's business, an important paper-ware firm in Karlsruhe.

After sixteen years of active participation in the business he retired, and in 1873 founded at Baden-Baden a private botanical garden. Only rare plants were admitted and the collection became famous. He specialised in *Lilium*, and accumulated in his garden a large number of these beautiful plants. A species of the Martagon group, introduced from Japan by Veitch, was named *L. Leichtlinii* in his honour by J. D. Hooker. His soil, however, was not suitable for lilies, and he discarded them in favour of other 'bulbous' plants and irises. His collection of irises was the largest in Germany. As a hybridist, too, he was highly successful.

Many new and rare species of 'bulbous' monocotyledons were introduced by him from the Near East, which for a number of years from 1888 he visited almost annually. One

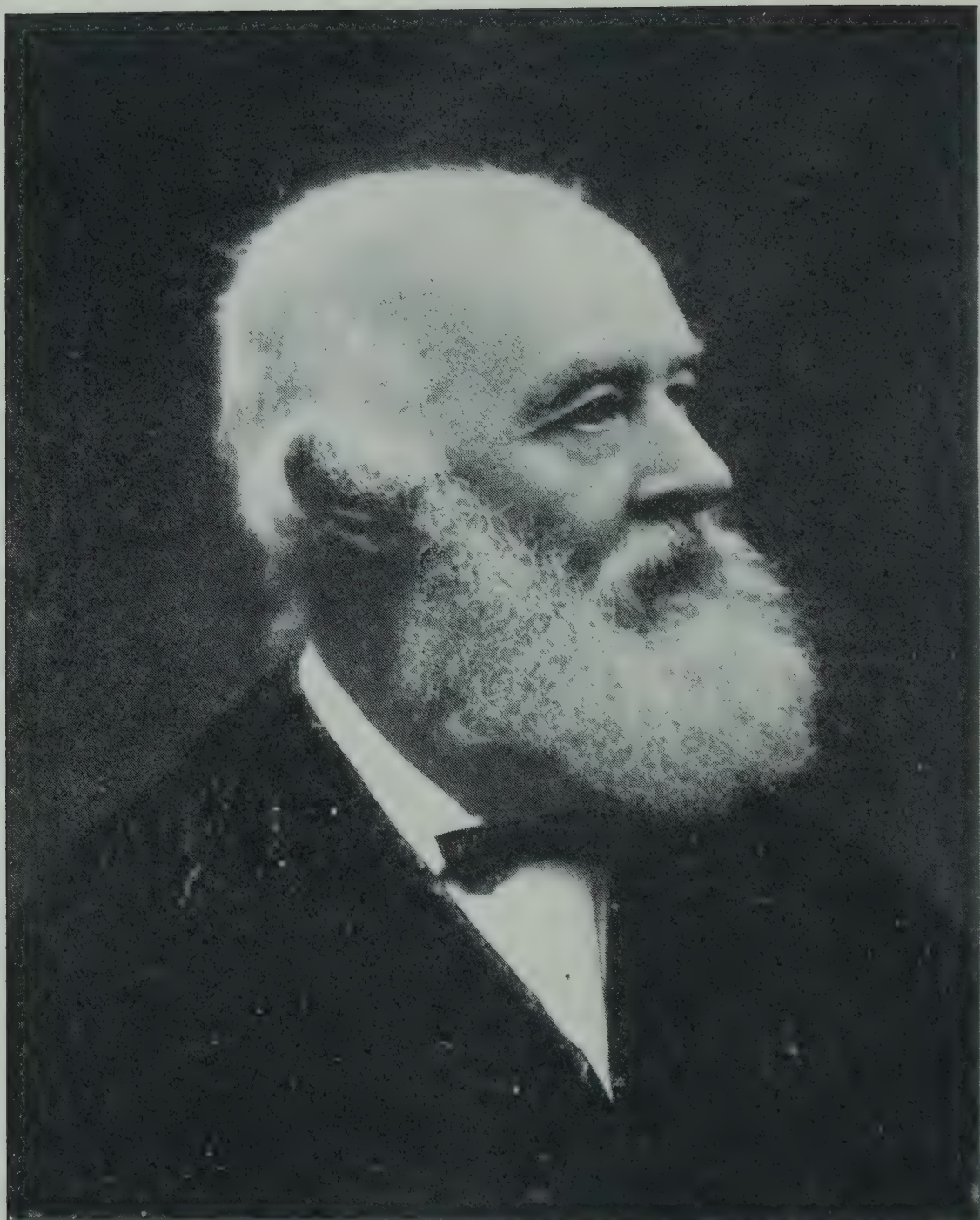
MAX LEICHTLIN (1831-1910)

of his finds was that near approach to a true blue *Gladiolus*, *G. armeniacus*. In a successful search for the beautiful *Jankaea Heldreichii*, soldiers had to be engaged against a threatened attack by bandits. Many of the fine species he brought home bear his name, and he was commemorated also in *Leichtlinia*, an amaryllidaceous genus of Mexico, in 1896.

Though rather more botanist than gardener his gardening skill was of great use to him in the cultivation of rare plants, the requirements of which were still imperfectly known.

Leichtlin was awarded the Veitch Memorial Medal by the Royal Horticultural Society for his services to horticulture. He also received the Silver Gilt Medal of the Society for the Advancement of Gardening in the Prussian States.

In his last years he had ill-health. He sold his villa and garden, gave up his seat on the town council, and lived a retired life. He died at Baden-Baden, Germany, on the 3rd of September, 1910.



Royal Botanic Gardens, Kew

JOHN BALL, ESQ., M.A., F.R.S., F.L.S.

TO WHOM VOLUME CX.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1884.

JOS. D. HOOKER.

JOHN BALL

(1818-1889)

JOHN BALL, son of the Rt. Hon. Nicholas Ball, who was sometime M.P. for Clonmel and Attorney-General for Ireland, was born in Dublin on the 20th of August, 1818. He spent some years at a Roman Catholic college, where he received a classical and mathematical education, his scientific leanings being discouraged in accordance with the fashion of the time. After attending the meeting of the British Association at Dublin in 1835, however, young Ball accompanied a party from Cambridge on a scientific tour to the west of Ireland, and was the author of a report on the geological results.

In 1836 he went to Christ's College, Cambridge, and his name appeared in the list of Wranglers in the Mathematical Tripos in 1839, but, being a Catholic, he could not take a degree. The University Professor of Botany, the Rev. J. S. Henslow, whose botanical excursions introduced the fascination of natural history to young Ball, had with Professor Babington a great share in influencing him to devote part of his scientific life to botany.

Ball was called to the Irish Bar in 1845 but never practised. Because of distress caused by the ravages of the potato disease he was appointed, in 1846, Assistant Poor Law Commissioner for Ireland. Ill-health forced him to resign after a year of strenuous activity, but he returned after recovery as Second Commissioner. He was elected M.P. for Carlow and in 1855 became Under-Secretary for the Colonies, a post he held for two years. Among other services to science during that period he organised the Palliser Expedition, which resulted in the first knowledge ever obtained of the geology of western Canada and the Rocky

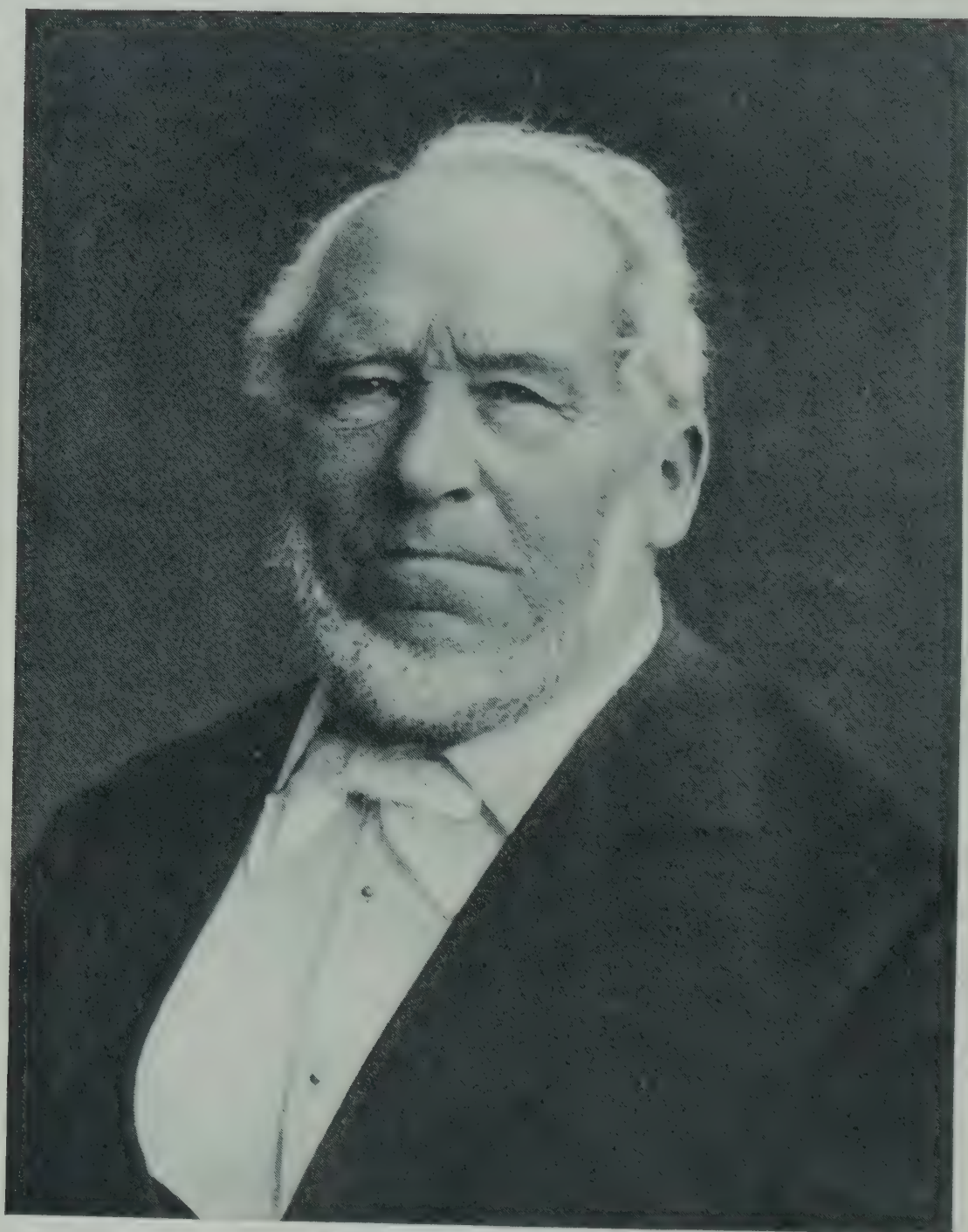
JOHN BALL (1818-1889)

Mountains. In 1858 his parliamentary career ended when he unsuccessfully contested Limerick.

He spent a large part of a busy early life in a minute topographical examination of the Alps. The result of this work was the *Alpine Guide*, which a competent critic referred to as the 'Johnson's Dictionary' of guide books. Besides his many visits to the Alps, Ball also made extensive journeys to Mediterranean countries, to the United States, and to the west coast of South America. He joined Sir Joseph Hooker and George Maw in an expedition to Morocco in 1871, and the resulting *Journal of a Tour in Morocco and the Great Atlas*, published in 1878, was mainly of his writing. The *Spicilegium Florae Maroccae*, which appeared in the *Journal of the Linnean Society*, xvi., 1877-78, was Ball's *magnum opus* in systematic botany. Prepared from material gathered on the expedition, and in the light of his knowledge of the kindred floras of Spain and the southern Alps, it is almost above criticism. Among other of Ball's published works his *Notes of a Naturalist in South America*, 1887, is notable. It was based on observations made during a five-months' voyage over 18,000 miles of ocean, and encircling the whole of the coast of South America from Panama to Brazil.

Ball belonged to many scientific societies, including the Linnean Society, from 1856, and the Royal Society, 1868, and late in life he received the Honorary Fellowship of his College at Cambridge. Though a great worker, he was heard to complain that his fondness for society prevented him giving much time to scientific work! He died at Kensington on the 21st of October, 1889.

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Royal Botanic Gardens, Kew.

DR. EDWARD DE REGEL

DIRECTOR OF THE IMPERIAL BOTANICAL GARDENS, ST. PETERSBURG

TO WHOM VOLUME CXI.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1885.

JOS. D. HOOKER.

DR. EDWARD DE REGEL

(1815-1892)

EDUARD AUGUST REGEL was born at Gotha, Germany, on the 13th of August, 1815. He was educated at the Gymnasium and afterwards, developing a taste for gardening, was apprenticed at the Grand Ducal Gardens at Gotha. During his apprenticeship he attended special classes for languages, mathematics, and drawing.

After a period spent under Dr. Fischer at Göttingen Botanic Garden, where he attended lectures by Professors Schrader and Bartling, Regel went on, in 1837, to Bonn. While at the Botanic Garden there he made a study of the local flora and, with Schmitz, published a *Flora Bonnensis* in 1841. In 1839 he entered Berlin Botanic Garden and soon began to contribute papers to the *Allgemeine Gartenzeitung*, a journal edited by Otto, Director of the Garden, and Dietrich.

An important step forward in his career was taken in 1842, when he was appointed Obergärtner of Zurich Botanic Garden. In conjunction with Dr. O. Heer, the celebrated palaeontologist, he founded, in 1843, the *Schweizerische Zeitschrift für Gartenbau*, afterwards becoming sole editor. He changed its title to *Gartenflora*, the name it still bears, in 1852, and continued to edit it until 1855. With the Directors of the Garden, Heer and Naegeli, he founded the Swiss Horticultural Society. He became a lecturer at Zurich University and a Ph.D.

The Zurich Garden during Regel's thirteen and a half years' curatorship was raised to a high position among botanic gardens. This was accomplished by his introduction of new plants and their rapid propagation and distribution in exchange.

This good gardener and good botanist was chosen, in 1855, to succeed C. A. Meyer, who had died, as Scientific

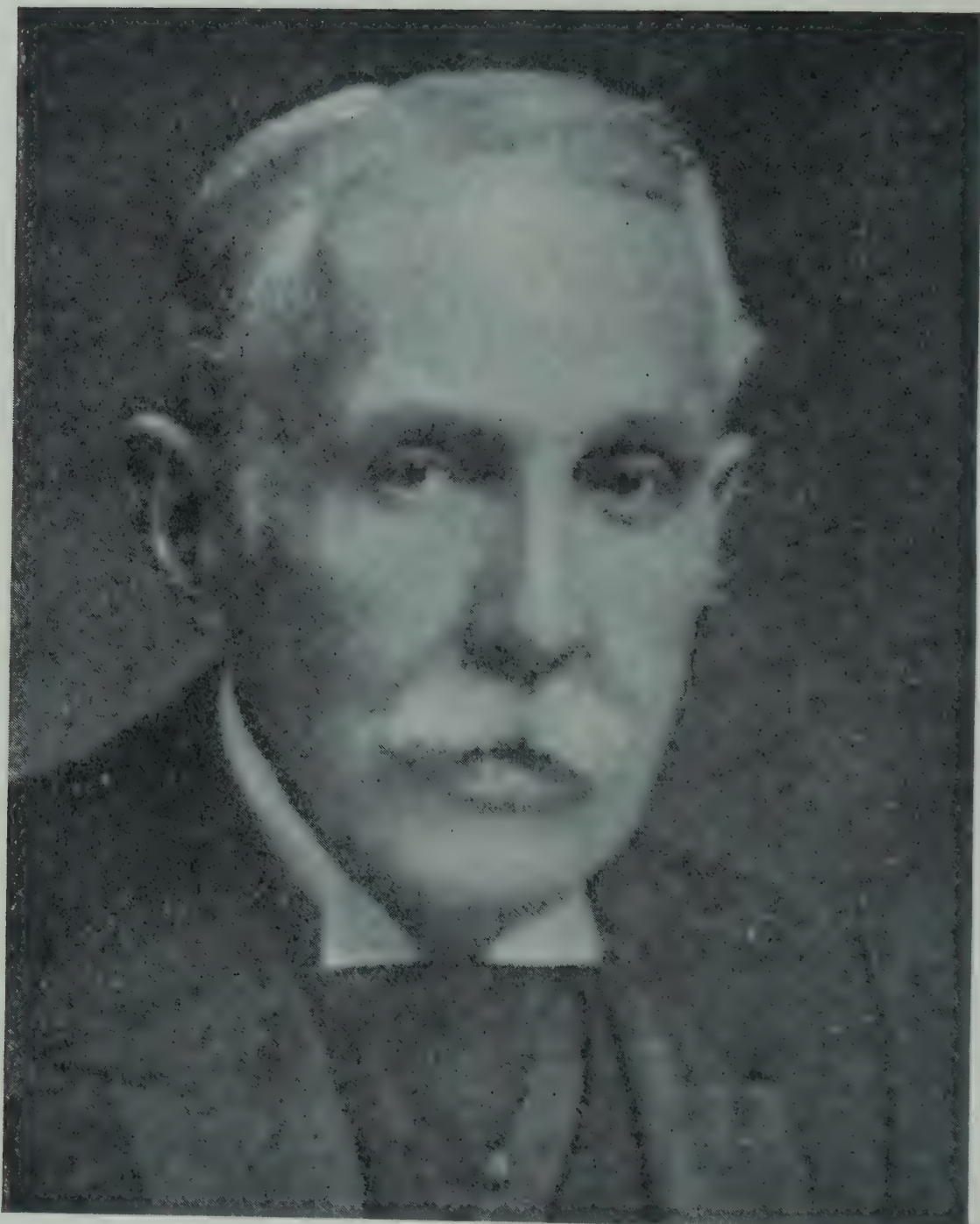
DR. EDWARD DE REGEL (1815-1892)

Director of the Imperial Botanic Garden at St. Petersburg. This establishment was in a neglected condition at the time of Regel's appointment, and for a time he was prevented from undertaking its improvement. Under Trautvetter's administration he got more freedom of action, and in 1875, after Trautvetter's retirement, became Director-General of the Garden. Then he began to rebuild the glass-houses and rearrange the living plant collection. As at Zurich he introduced many plants, chiefly from Central Asia, described them, and distributed them liberally to foreign botanic gardens and nurseries.

His services to horticulture were great. Superior varieties of fruits, vegetables, and flowers were introduced by him, and it was mainly through his exertions that the first flower show was held in St. Petersburg. That was in 1858. In that year he founded the Russian Horticultural Society.

Regel's well-known monograph of the genus *Allium* was published in 1875. Over 250 species were described in it, including many new ones resulting from Asiatic explorations. In addition to numerous papers and pamphlets he published important work on the floras of Siberia and Turkestan.

Dr. Regel received many honours in his adopted country. In 1890 he was elected a Foreign Member of the Linnean Society of London. The genus *Regelia* was so named in his honour by Schauer in 1843. He died on the 27th of April, 1892.



Royal Botanic Gardens, Kew.

SIR TREVOR LAWRENCE, BART., M.P.

PRESIDENT OF THE ROYAL HORTICULTURAL SOCIETY

TO WHOM VOLUME CXII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1886.

JOS. D. HOOKER.

SIR TREVOR LAWRENCE, BART.

(1831-1913)

JAMES JOHN TREVOR LAWRENCE, only surviving son of the first Baronet, Sir William Lawrence, F.R.S., a distinguished surgeon, was born in London on the 30th of December, 1831. He was educated at Winchester and studied medicine at St. Bartholomew's Hospital.

He joined the Indian Medical Service in 1853 and served for ten years, covering the period of the Mutiny. For a long time he was stationed in the Himalaya region.

In 1867 he succeeded his father as second Baronet. As a Conservative he unsuccessfully contested the city of Gloucester in 1874, but was returned unopposed for one of the two mid-Surrey seats in the following year. The House of Commons heard him infrequently, and he retired from Parliament in 1892.

On retiring from politics Sir Trevor succeeded Sir Sydney Waterlow as Treasurer of St. Bartholomew's Hospital, where he did good work, including the rebuilding of the pathological section and the out-patients department. He helped to secure for the staff a voice in the management of the hospital, and to make the hospital the direct landlord of its property. Every year he gave a hundred pounds for a research studentship at the hospital and assisted in founding, in honour of his father, the Lawrence Scholarship there. He relinquished the treasurership in 1904.

Sir Trevor Lawrence inherited his love for flowers from his mother who, at Ealing Park, Middlesex, was one of the leading horticulturists of her time. A great orchid grower, Sir Trevor was successful with the more showy, popular kinds, and probably had the best private collection in existence of the less conspicuous species. He also grew, equally successfully, both tender and hardy plants. An orchid from

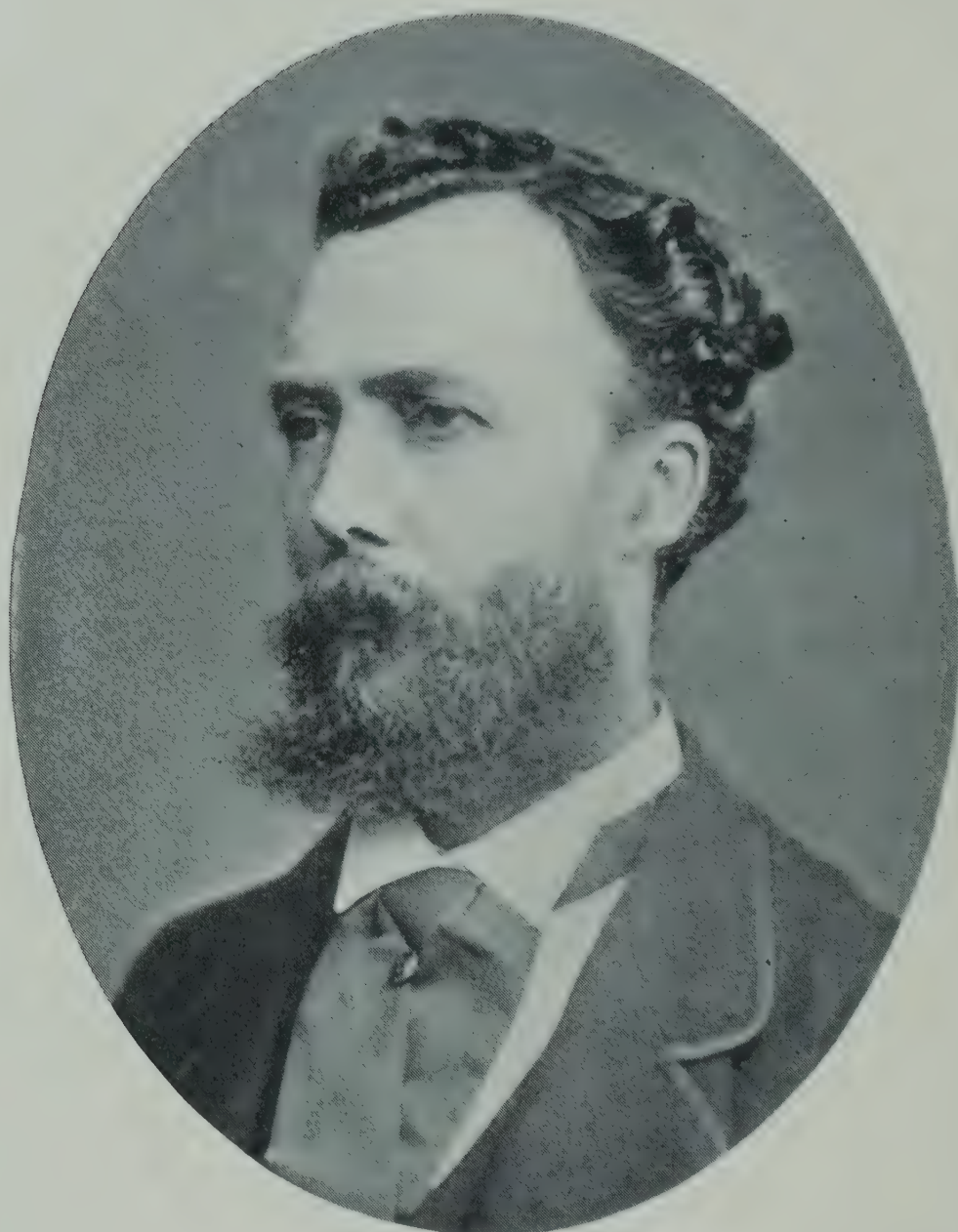
SIR TREVOR LAWRENCE (1831-1913)

the Andes, *Trevoria Chloris*, was so named in his honour by F. C. Lehmann in 1897.

For twenty-eight years, from 1885 to 1913, he was President of the Royal Horticultural Society, and he rendered great services to the Society and to horticulture. When he took office the Society was in a poor state, with hardly a thousand Fellows, no buildings of its own, and an annually increasing deficit. Undaunted by difficulties he, with the help of others such as the Rev. William Wilks, the Secretary, transformed the Society. A magnificent hall was built at Vincent Square and a fine, extensive garden at Wisley, Surrey, was presented to the Society by Sir Thomas Hanbury; the membership went up rapidly, and there was an increasing balance on each year's working. His services were recognised by the award, in 1900, of the Victoria Medal of Honour, by the foundation of the Lawrence Medal, and by the presentation to him of the Veitch Memorial Medal in gold in 1913.

Lawrence had one of the finest collections of Japanese lacquer in this country, and he printed an illustrated catalogue of this for private circulation in 1895. He had also a good collection of Chinese and Japanese porcelain.

He was on terms of friendship with such great men as Lister, Kelvin, Pasteur, and Herbert Spencer. On Lord Lister's recommendation Sir Trevor was appointed a member of King Edward's Hospital Fund from its inauguration. He was Knight of Grace of the Order of St. John of Jerusalem, and in 1902 was created K.C.V.O. His death occurred at Burford, Dorking, Surrey, on the 22nd of December, 1913.



Royal Botanic Gardens, Kew.

SIR JOHN KIRK, G.C.M.G., F.R.S., F.L.S.

LATE H.M. AGENT AND CONSUL-GENERAL AT ZANZIBAR

TO WHOM VOLUME CXIII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1887.

JOS. D. HOOKER.

SIR JOHN KIRK

(1832-1922)

JOHN KIRK, second son of the Rev. John Kirk, was born at Barry, Forfarshire, on the 19th of December, 1832. Before the age of fifteen he entered the University of Edinburgh, graduating M.D. and L.R.C.S. in 1854.

The Crimean War broke out in the same year, and young Kirk served on the Civil Medical Staff in Turkey and the Dardanelles up to the beginning of 1857. During that time he found leisure to pursue the study of botany, for which he had developed a liking while a member of Professor J. H. Balfour's class at Edinburgh. In 1854 he, an undergraduate, had been elected a Fellow of the Edinburgh Botanical Society.

A medical officer who was also a naturalist was required to accompany Dr. David Livingstone's Expedition which set out in March 1858 to explore Central Africa by way of the Zambesi river. The post was offered to Dr. Kirk. He accepted, and for five years was the 'tried and valued associate' of Livingstone. His plant specimens, sent to Kew from East Africa, included many new species, over a hundred of which commemorate his name. Four cases of these plants sent home in 1861 went astray, and were found nearly thirty years afterwards stowed away in Portsmouth dock-yard! Kirk's zoological contributions to the Natural History Museum at South Kensington were also important, and represented every province in the animal kingdom. Plants and animals in a living state also were despatched from the Zambesi region.

A severe attack of dysentery forced Kirk home in 1863. On regaining his health he settled in London to study his collections. In 1864 his *List of the Mammals of Zambesia* appeared in the *Journal of the Zoological Society*. He was

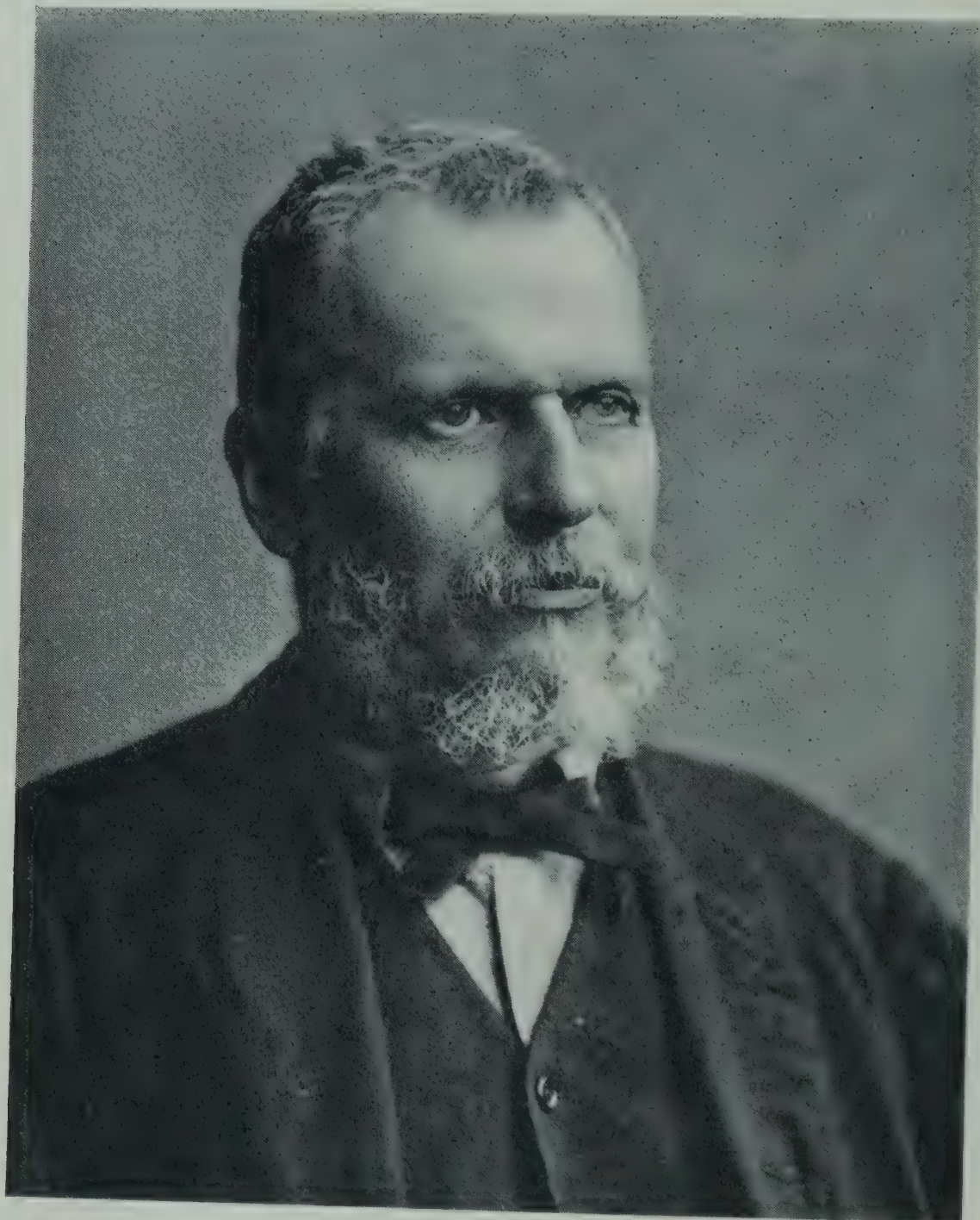
SIR JOHN KIRK (1832-1922)

elected to the Zoological as well as to the Linnean Society in 1864. He had been made a Fellow of the Geographical Society some years earlier. The Linnean Society's *Journal* for 1867 contained contributions from him entitled, *The Palms of East Africa*, *A New African Musa*, and *A New Zambesian Dye-wood*. Besides these activities he was constantly consulted by the Livingstone brothers in the preparation of their *Narrative*, published in 1865.

Kirk was eager to return to Africa, and in 1865 he was appointed Acting Surgeon to the Political Agency at Zanzibar. He himself eventually became Political Agent, and acquired so much influence that he was said to be more powerful than the Sultan. The practical suppression of the slave trade in East Africa was mainly due to Kirk's efforts. This official connection with Zanzibar lasted twenty-one years. He created and maintained a fine experimental garden at Zanzibar during his sojourn there.

He was created K.C.M.G. in 1881, G.C.M.G. in 1886, and K.C.B. in 1890. He was elected in 1887 a Fellow of the Royal Society, and received many honorary degrees. In the later years of his life Sir John Kirk was actively associated with the management of the Royal Geographical Society, and was awarded the Patron's Medal in 1882 'for his long-continued and unremitting services to geography in Africa.' *Kirkia*, a genus of African plants, commemorates him.

This great public servant passed away at Sevenoaks, Kent, on the 15th of January, 1922, in his 90th year.



Royal Botanic Gardens, Kew.

C. B. CLARKE, ESQ., M.A., F.R.S., F.L.S.

TO WHOM VOLUME CXIV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1888.

JOS. D. HOOKER.

CHARLES BARON CLARKE

(1832-1906)

CHARLES BARON CLARKE, born on the 17th of June, 1832, was the eldest son of Turner Poulter Clarke, J.P., of Andover, Hampshire. From King's College, London, Clarke went to Trinity College, Cambridge, and later to Queens'. In his graduate year, 1856, he was bracketed Third Wrangler, and became a Fellow of Queens' College in 1857. He was called to the Bar at Lincoln's Inn, and appointed Mathematical Lecturer of his College in 1858. He took his M.A. in 1859. While at Cambridge Clarke had many and varied interests, of which political economy and mountain-climbing in search of plants claimed the lion's share of his attention.

He joined the teaching staff of the Presidency College, Calcutta, under the Bengal Educational Department, in 1866, and was soon promoted to an inspectorship with headquarters at Dacca. This work gave him excellent opportunities for the study of the vegetation in and around the districts through which his duties took him. Early in 1868, in a boat-wreck, Clarke lost the whole of his Bengal plants, seven thousand specimens. Undiscouraged, he began afresh, and his collections as known to botanists commenced in 1868. From 1869 until 1871 Clarke acted as Superintendent of the Royal Botanic Garden, Sibpur, Calcutta, afterwards returning to a higher grade in the Educational Department at Bengal. It is impossible to deal adequately here with his numerous journeys in search of plants during his Indian years. They were many in number and rich in results. His herbarium, which was presented to Kew, contained 25,000 specimens of some five thousand species. He was an admirable collector, his fine specimens being always fully annotated and as complete as he could make them.

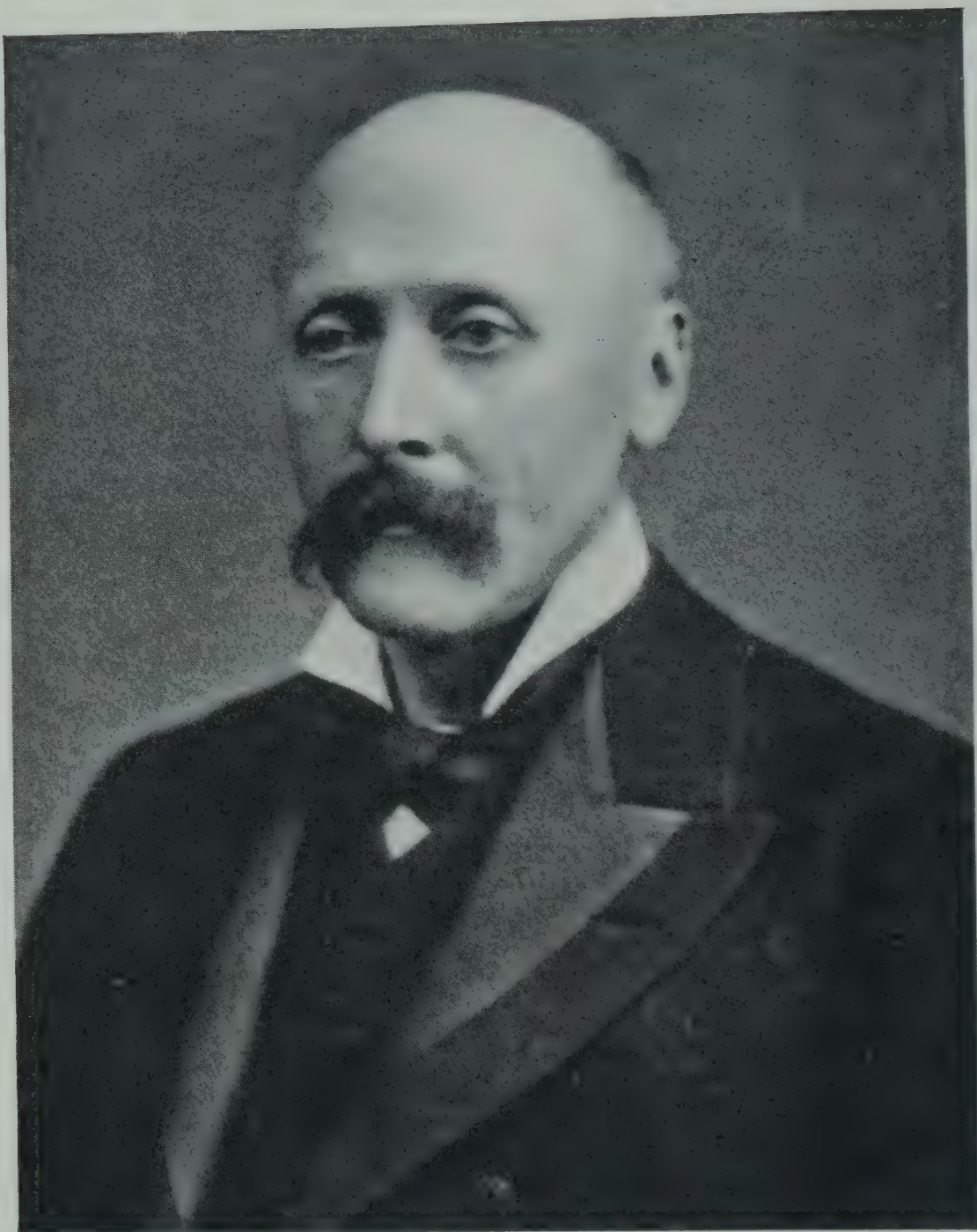
CHARLES BARON CLARKE (1832-1906)

Clarke returned to Europe in 1877 on two years' furlough. When his leave expired he was employed on special duty at the Kew Herbarium until 1883 in helping Sir Joseph Hooker prepare the *Flora of British India*. His authoritative knowledge of the *Cyperaceae*, which with many other families he elaborated for the *Flora*, was further used in many smaller papers and in the identification of species in various collections. A genus of *Rubiaceae* from India was described by Hooker in the *Flora* under the name *Clarkella* in honour of his friend.

He had a great knowledge of history, especially English history, and most detailed with regard to the Tudor and Stuart periods. Though none of his historical work was published, he was engaged on a history of England for some time before his death and had completed his manuscript to the reign of James I.

The Linnean Society elected Clarke a Fellow in 1867, and he was on the Council for sixteen years from 1880, Vice-President on seven occasions, and President for two years, 1894-96. He became a Fellow of the Royal Society in 1882, and served on its Council from 1888-90, and he also belonged to the Geological Society.

After retirement from Indian service, in 1887, Clarke resided near the Kew Herbarium, where he was a voluntary worker for nineteen years. He placed his special knowledge of Indian plants and of the *Cyperaceae* at the disposal of his fellows at Kew, his unselfishness in this direction often seriously interfering with his own special studies. His death took place at Kew on the 25th of August, 1906.



Courtesy of T. Hay, Esq.

ISAAC BAYLEY BALFOUR, D.Sc., M.D., F.R.S.

PROFESSOR OF BOTANY IN THE UNIVERSITY OF EDINBURGH

TO WHOM VOLUME CXV.

IS DEDICATED

ROYAL GARDENS, KEW,
DECEMBER 1, 1889.

JOS. D. HOOKER.

ISAAC BAYLEY BALFOUR

(1853-1922)

ISAAC BAYLEY BALFOUR, son of John Hutton Balfour, was born in Edinburgh on the 31st of March, 1853. Edinburgh Academy was his first school, and he proceeded later to the University where he graduated B.Sc. in 1873.

In the following year he was chosen by the Royal Society as botanist and geologist to the astronomical expedition to Rodriguez to observe the transit of Venus. This supplied material for a thesis which gave him his D.Sc., with first-class honours, in 1875. His report on the botanical results of the expedition was published in the *Philosophical Transactions of the Royal Society*, 1879. Monographs on *Halophila* and *Pandanus* also resulted from observations during the journey.

He spent the winter of 1879-80 in a geological and botanical study of the island of Socotra under the auspices of the Royal Society and the British Association. On the results was based a dissertation which gained him a University medal when he graduated as M.D. in 1883. One Socotra find was *Begonia socotrana*, from which has been derived a number of valuable winter-flowering varieties.

In 1879, when only twenty-six, he was appointed Professor of Botany at Glasgow University. While there he reconstructed the main range of plant houses, and gave a more healthy and vigorous life to the whole establishment.

His appointment as Sherardian Professor of Botany at Oxford came in 1884, carrying with it charge of the Botanic Garden. Again his reconstructive activity was called into play. The garden was largely rearranged and the herbarium and library were completely reorganised. Perhaps his greatest service to botany, while at Oxford, was the large share he took in the founding of the *Annals of Botany*, of which he was also one of the editors from its birth in 1887 until 1912.

ISAAC BAYLEY BALFOUR (1853-1922)

This venture, both financially and scientifically, was a complete success. Almost as great a task was the editing, and largely the translating, of the standard German text-books such as Goebel's *Organography*, Schimper's *Plant Geography* and Warming's *Oecology of Plants*.

Balfour left Oxford in 1888 to become Professor of Botany in the University of Edinburgh, with the additional posts of Queen's Botanist for Scotland and Regius Keeper of the Royal Botanic Garden. These positions he held for the same length of time, thirty-four years, as his father had before him. During that long period his success as a teacher of botany was complete, and his accomplishment was equally great as Director of the Botanic Garden. He constructed glass-houses and propagating frames to raise and display the remarkable collection of plants which he amassed in the gardens.

Some of Balfour's published work has already been mentioned. The volume on the *Botany of Socotra*, 1888, was his greatest systematic production until, later in life, he became the recognised authority on the flora of south-west China. In this connection he undertook the critical investigation of the genera *Primula* and *Rhododendron*, which gave him a high and permanent position among systematic botanists. His 'Masters' lecture on plant propagation, published in the *Journal of the Royal Horticultural Society* in 1912, affords evidence of his knowledge of practical horticultural problems, acquired in his father's potting sheds at Edinburgh from Curator Sanders.

Balfour was elected Fellow of numerous societies, including the Linnean, 1875, the Edinburgh Royal, 1877, and the Royal Society of London, 1884. Failing health prevented his accepting the Presidency of the Linnean Society, offered in 1916. This Society bestowed on him in 1919 the Linnean Medal. He was created K.B.E. in 1920 for services rendered during the Great War. The Victoria Medal of Honour was awarded him in 1897. His death took place at Haslemere, Surrey, on the 30th of November, 1922. He is commemorated in the genus *Balfourina*.



Royal Botanic Gardens, Kew.

GEORGE FERGUSSON WILSON, ESQ., F.R.S., F.L.S.

HEATHER BANK, WEYBRIDGE

TO WHOM VOLUME CXVI.

IS DEDICATED

JOS. D. HOOKER.

GEORGE FERGUSSON WILSON

(1822-1902)

GEORGE FERGUSSON WILSON was born at Wandsworth Common on the 25th of March, 1822. He was educated at Wandsworth and spent some time in a solicitor's office.

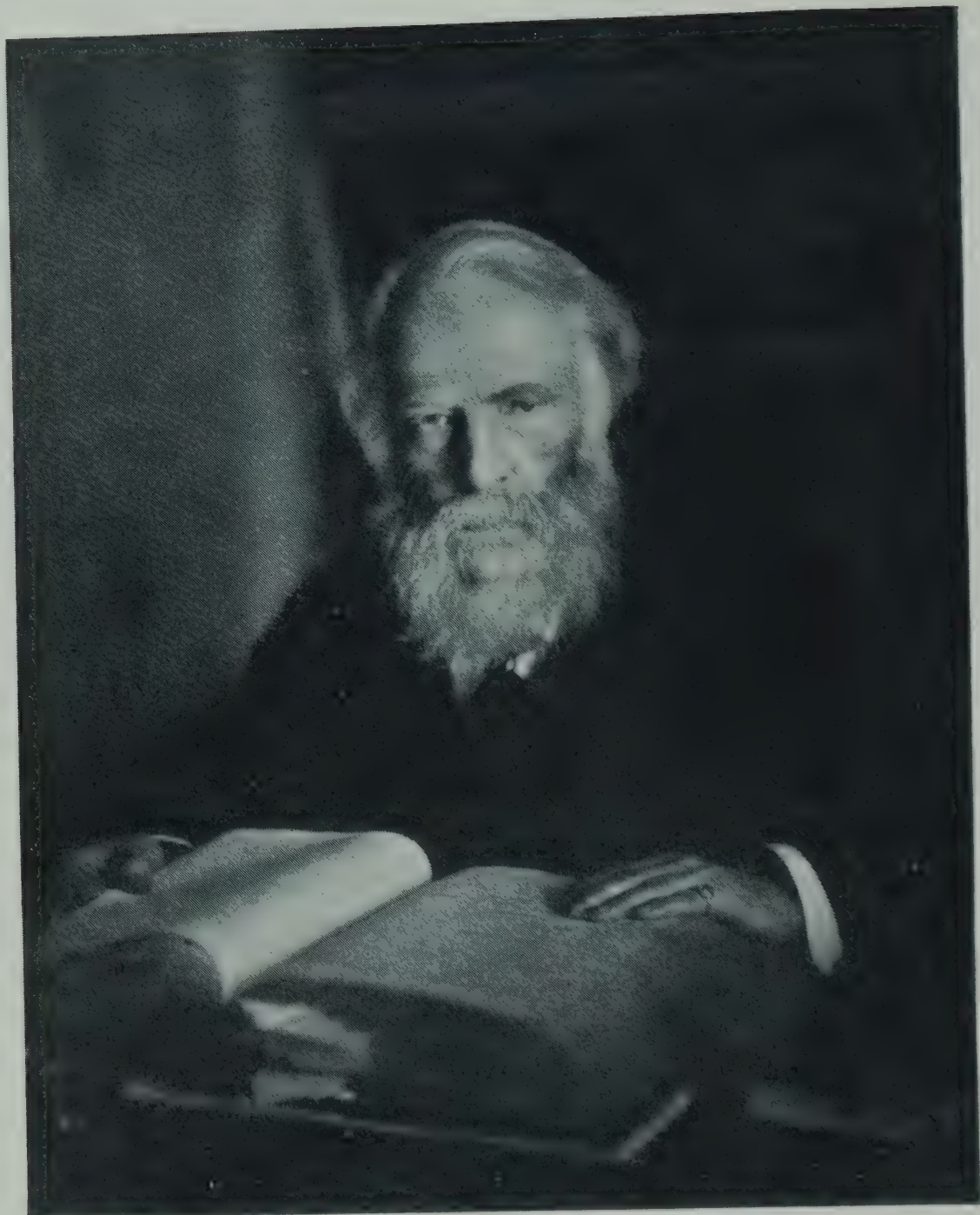
In 1840 he entered his father's candle-making business. He showed great interest in the experimental work of the firm and, with W. C. Jones, patented in 1842 a process by which cheap malodorous fats could be used in place of tallow for candle-making. The firm became prosperous and the business was sold in 1847 for £250,000. The creation of a new concern, Price's Patent Candle Company, followed, with a capital of £500,000, and Wilson and an elder brother were appointed Managing Directors. In 1854 he made the very important discovery of a process of manufacturing pure glycerine. Before that date even the most costly glycerine was so impure as to be nearly useless for most purposes. In his later years Wilson gave another illustration of the practical application of his chemical knowledge by the introduction of that valuable insecticide, Gishurst Compound, now universally used by gardeners.

In 1845 Wilson became a member of the Society of Arts. He was an active member of its Council for some years, and Treasurer from 1861 to 1863. He read a paper before the Royal Society in 1854 entitled, *On the Value of Steam in the Decomposition of Neutral Fatty Bodies*, and was elected a Fellow in the following year. The Chemical Society elected him a Fellow in 1855, and in the same year he read his paper on a new process of obtaining and purifying glycerine at the Meeting of the British Association at Glasgow. He was elected a Fellow of the Linnean Society in 1875.

Later in life he went to live at Weybridge, Surrey, and acquiring some land a few miles away, at Wisley, he devoted

GEORGE FERGUSSON WILSON (1822-1902)

himself to experimental gardening on a wide scale. He was especially successful in the cultivation of lilies, and between 1867 and 1883 these plants gained as many as twenty-five first-class certificates from the Royal Horticultural Society. He joined this Society, served on its committees, and was at one time Vice-President. It was at his suggestion that the Society, at a low ebb when he joined the Council, introduced the guinea subscription. This was unpopular at the time but proved one of the means to prosperity. In 1876 he published a booklet, *The Royal Horticultural Society : as it is and as it might be*. The garden he created at Wisley now belongs to the Society. The Victoria Medal of Honour was awarded him in 1897. He died at Weybridge Heath, Surrey, on the 28th of March, 1902.



Courtesy of Sir A. C. Grant Duff.

THE RIGHT HONOURABLE
SIR MOUNTSTUART ELPHINSTONE GRANT DUFF
G.C.S.I., C.I.E., F.R.S. AND L.S.

PRESIDENT OF THE ROYAL GEOGRAPHICAL SOCIETY

TO WHOM VOLUME CXVII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1891.

JOS. D. HOOKER.

SIR MOUNTSTUART ELPHINSTONE GRANT DUFF

(1829-1906)

MOUNTSTUART ELPHINSTONE GRANT DUFF was born at Eden, Aberdeenshire, on the 21st of February, 1829. He was educated at Edinburgh Academy, at the Grange School, and at Balliol College, Oxford, where he graduated in 1850 and proceeded M.A. in 1853. He was called to the Bar of the Inner Temple in the following year.

In 1857 he was elected Liberal Member of Parliament for the Elgin Burghs, a seat which he held until appointed Governor of Madras in 1881. During that period he held office in Gladstone's first ministry as Under-Secretary of State for India, 1868-74, and in the second Gladstone government as Under-Secretary for the Colonies, 1880-81. For several years he was Lord Rector of Aberdeen University. He applied himself strenuously to his administrative duties in the governorship of Madras, which post he relinquished in 1886. After his return home in the year following he was invested at Windsor with the G.C.S.I. He had been made C.I.E. in 1881.

Grant Duff found that home politics had become embittered, during his absence, with the Home Rule controversy, and being too calm and scholarly a man for violent political conflict he devoted himself thenceforward to a studious and social life. He became acquainted with most persons of eminence in England and on the Continent, and was a member of the chief social clubs. This intercourse with the best informed people of his day furnished him with material for his principal literary work, *Notes from a Diary*, published in fourteen volumes during the years 1897 to 1905. The *Notes*, a record of the sayings of the folk he met, cover the fifty years from the taking of his degree down to

SIR M. E. GRANT DUFF (1829-1906)

his becoming a Privy Councillor on the accession of King Edward VII. He was the author of several political publications including *Studies of European Politics*, 1866, and *Elgin Speeches*, 1871. Three memoirs, too, came from his pen. That of *Sir Henry Maine* appeared in 1892, of *Ernest Renan* in 1893-98, and a fine biography of *Lord de Tabley* formed the preface to that nobleman's posthumous *Flora of Cheshire*, 1899. Two volumes of *Biographical Essays* were issued by him in 1903.

His affection for natural science, which was strong and lasting, found expression in various ways. It was largely owing to his exertions, while he was at the India Office, that valuable interest was aroused in the projected *Flora of British India*, that great work of his friend, J. D. Hooker. Grant Duff was a keen student of the British flora, and his fondness for botanical rambles he encouraged others to share. In his *Notes from a Diary* is much delightful chatter about botanists and plants. A beautiful native of the Orient, *Iris Grant Duffii*, was named in his honour by J. G. Baker.

From 1889 to 1893 he was President of the Royal Geographical Society, of the Royal Historical Society, 1892-99, a Member of the Senate of London University from 1891, and a Trustee of the British Museum from 1903. He was elected a Fellow of the Linnean Society in 1872 and of the Royal Society in 1881. His death took place in London on the 12th of January, 1906.



Royal Botanic Gardens, Kew.

HENRY TRIMEN, ESQ., M.B., F.R.S., F.L.S.

DIRECTOR OF THE ROYAL BOTANIC GARDENS, PERADENIYA, CEYLON

TO WHOM VOLUME CXVIII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1892.

JOS. D. HOOKER.

HENRY TRIMEN

(1843-1896)

HENRY TRIMEN was born on the 26th of October, 1843, at Paddington. He entered King's College School, London, in 1855, and began his medical studies at King's College in 1860. Quite early he developed a taste for natural history, and while still at college became an ardent plant collector. He had as friend Mr. (afterwards Sir) W. T. Thiselton-Dyer, another keen botanist, and the two projected a *Flora of Middlesex*. This appeared in 1869 and was described by a competent critic as 'an epoch-making book in the history of British botany' and 'a model for subsequent compilers of local floras.'

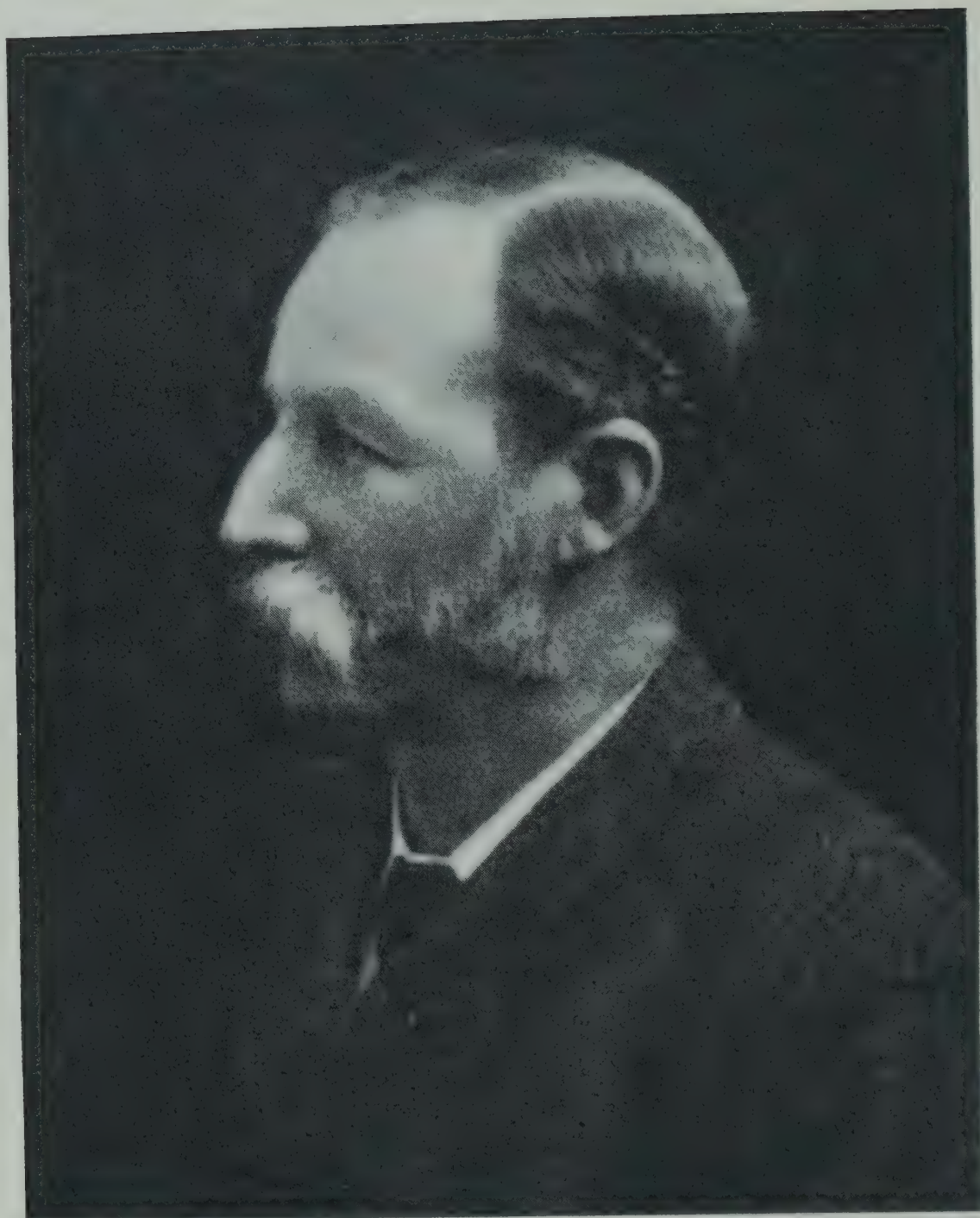
Although Trimen obtained an honours degree in medicine at London University, botany proved more attractive, and in 1869 he was appointed Assistant in the Department of Botany at the British Museum. The Linnean Society elected him a Fellow in 1866, and in the following year he became Botanical Lecturer to St. Mary's Hospital, a post he held until 1872. He edited the *Journal of Botany* from 1870 to 1879; and during the years 1875-79 he collaborated with Professor Bentley in producing the standard work, *Medicinal Plants*, which appeared in four volumes. As this task was nearing completion, Trimen, like the true naturalist, began to find museum work irksome.

Just then the Directorship of the Royal Botanic Gardens, Peradeniya, Ceylon, fell vacant through the retirement of that distinguished botanist, Dr. Thwaites, and, though the British Museum authorities tempted him to remain, he accepted the offer of the post. For sixteen years he occupied that office with signal success, undertaking a complete rearrangement of the gardens, including the labelling of the plants.

HENRY TRIMEN (1843-1896)

He also began the preparation of a flora of the island, a task aided by the large number of specimens collected by Dr. Thwaites. Three volumes of Trimen's *Handbook to the Flora of Ceylon* appeared in the years 1893-95. Unfortunately serious illness prevented his completing this fine work. Deafness and paralysis caused him to come home in 1895. In the following year the Ceylon Government were forced to retire him, but they allowed him funds to complete his *Flora* of the island. In rapidly failing health he made a great effort to finish the task, even making notes, scarcely decipherable, on the day before his death, which occurred at Peradeniya on the 16th of October, 1896. Sir Joseph Hooker completed the *Flora* with two further volumes, 1898-1900.

Dr. Trimen was elected, in 1888, a Fellow of the Royal Society. He was a man of action rather than a theorist, and his work, though lacking brilliance, was judicious and trustworthy. His name is commemorated in the genus *Trimenia*.



Royal Botanic Gardens, Kew.

THOMAS HANBURY, ESQ., F.L.S.

PALAZZO ORENGO, LA MORTOLA, VENTIMIGLIA

TO WHOM VOLUME CXIX.

IS DEDICATED

J. D. HOOKER.

THOMAS HANBURY

(1832-1907)

THOMAS HANBURY was born on the 21st of June, 1832, at Clapham, Surrey. Of Quaker stock he was sent to schools at Croydon and Epping attended largely by children of members of the Society of Friends. After leaving school he had a tutor until, at the age of seventeen, he was placed with a firm of tea brokers in Mincing Lane.

His progress was so good that when only twenty-one he was enabled to join the business partnership of Hanbury and Company, newly formed at Shanghai. From 1853 till 1872, with two short holidays in Europe intervening, Hanbury lived the busy life of a merchant in China. His reputation for honesty and integrity was very evident during the great Taiping Rebellion which raged from 1850 to 1864. When disturbances threatened Shanghai, many of the wealthy Chinese put their land and property into his care without requesting so much as a receipt for their acquirement.

It was during the second of his short holidays in Europe that Hanbury fell in love with the natural beauties of the promontory of La Mortola, Italy. He bought the ruined Palazzo Orengo with its surrounding olive groves and vine terraces in 1867, and conceived the idea of forming, with the aid of his brother Daniel, who was an authority on medicinal plants, a botanical collection there. Thus began the garden, over two hundred acres in extent, which has become world-famous and given pleasure and instruction to countless visitors.

Education and culture in Liguria were stimulated by Hanbury, who built several schools and libraries there. He also founded, in 1892, a Botanical Institute at Genoa which he presented to the University. For these services he was made *Cavaliere dell' Ordine di S.S. Maurizio et Lazzaro*

THOMAS HANBURY (1832-1907)

and *Commendatore della Corona d'Italia*. In 1892 he was awarded a gold medal as Benefactor of Public Instruction, and he received the freedom of the cities of Genoa and Ventimiglia. In his own country, in 1901, he was made a Knight Commander of the Royal Victorian Order. He was elected a Fellow of the Linnean Society in 1878. In 1903 he received the Victoria Medal of Honour.

Sir Thomas Hanbury bought in 1903 the garden of sixty acres which had belonged to G. F. Wilson at Wisley, Surrey, and presented it to the Royal Horticultural Society, who moved there from Chiswick. His interest in the *Botanical Magazine* was demonstrated by his gift of many rarities, the first of which was *Senecio Haworthii*, to be figured in it.

The passing of Sir Thomas at La Mortola on the 9th of March, 1907, was an occasion of grief to his many friends, and he was much mourned by the country folk living around La Mortola. Quakerism had lost a son who splendidly 'lived the inward light.' The Royal Horticultural Society erected a memorial tablet to him at Wisley.



Courtesy of Mrs. Ford.

CHARLES FORD, ESQ., F.L.S.

SUPERINTENDENT, BOTANICAL AND AFFORESTATION DEPARTMENT
OF HONG KONG

TO WHOM VOLUME CXX.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1894.

J. D. HOOKER.

CHARLES FORD

(1844-1927)

CHARLES FORD was born on the 12th of July, 1844.

On the recommendation of the Director of the Royal Botanic Gardens, Kew, he was appointed Superintendent of the Public Gardens, Hong Kong, in 1871. He had charge of the Government Gardens, the Public Gardens, a vegetable garden at the summit of Mount Victoria, and all the trees bordering the streets. Thirty-four coolies constituted his staff. The gardens were in a poor state on his arrival, and he at once set about their improvement. The hillsides, too, were almost bare of vegetation except for scattered patches of scrub and coarse grasses, but when he retired they were well clothed with trees, forming a scene of beauty which never failed to excite admiration.

In 1873 Ford went plant hunting in north China. In the following year he wrote to the Kew Director, Dr. J. D. Hooker, for advice in forming an herbarium, and also appealed to him for assistance in obtaining second-hand books as his grant of money was not large enough to cover the cost of new ones. He went via Singapore to India in 1876, and a year later came to England on sixteen months' leave. Soon after his return in 1878 a separate officer was appointed for the Forestry Department, and in 1879 the Public Gardens became the Botanic Gardens. In 1880 he was again given charge of the whole establishment and his salary raised by £125. In the ten years up to 1884 the herbarium had accumulated more than two thousand specimens, and the number annually incorporated was rapidly increasing. To his living collections he added many fine native and exotic plants, the latter including *Hedychium coronarium* from the Philippines, a popular introduction on account of its showy flowers and sweet perfume.

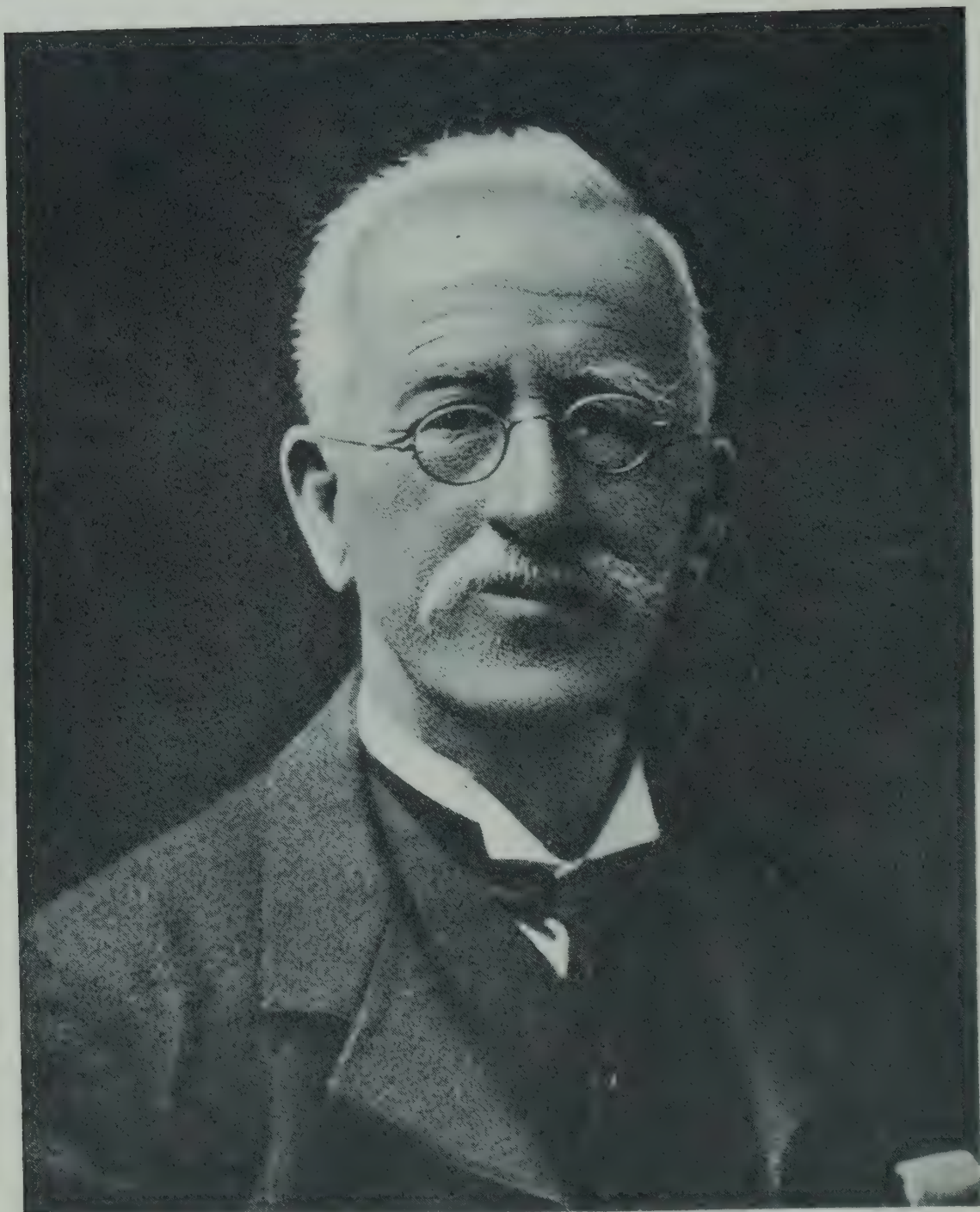
CHARLES FORD (1844-1927)

In the midst of these activities Ford was able to collect from time to time many interesting plants from the district around Hong Kong to send to Kew in Wardian cases. Many of these flowered, and were judged worthy of inclusion in the *Botanical Magazine*. He again came to England on leave in 1886, and brought specimens of woods to the Indian and Colonial Exhibition.

He published in 1876 a *Catalogue of Plants in the Government Gardens, Hong Kong*, and twenty years later *Classified Catalogue of the Library of the Botanic Gardens, Hong Kong*. In 1883 he compiled an *Index of Chinese Plants* occurring in volumes i.-xviii. of the *Journal of Botany*. *Notes on Chinese Materia Medica*, from his pen, appeared in the *China Review* during 1887. A *Report on the Gardens* was issued for 1872, followed by others at irregular intervals.

Ford received the Imperial Service Order in 1904. The Linnean Society elected him a Fellow in 1885, and in the year following Hemsley commemorated him in the leguminous genus *Fordia*.

In 1902 he retired and lived for a time at Ripon, Yorkshire. He removed in 1913 to Stanmore, Middlesex, where he died on the 14th of July, 1927.



Royal Botanic Gardens, Kew.

HARRY BOLUS, ESQ., F.L.S.

SHERWOOD, KENILWORTH, CAPE TOWN

TO WHOM VOLUME CXXI.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1895.

J. D. HOOKER.

HARRY BOLUS

(1834-1911)

HARRY BOLUS was born at Nottingham on the 28th of April, 1834, and went out to the Cape, a poor apprentice, when sixteen. He began the study of botany in 1864, on the death of his first child. This hobby he pursued wholeheartedly, making excursions up the mountains in search of plants, which he described carefully with pencil and pen. He corresponded with Sir Joseph Hooker, and sent a large number of succulents and bulbs alive to Kew. South African botanists, among whom were Professors MacOwan and Guthrie, became his friends.

For fifteen years Bolus lived at Graaff Reinet, in the centre of the Colony. His career there was varied indeed. First a boy with a few shillings in his pocket, then a volunteer in a Kaffir war, later an insurance secretary, and later still a sheep-farmer. In 1874 he joined his brother in Cape Town as a broker. He retired twenty years later with a considerable fortune.

The heaths and orchids of the Cape specially attracted Bolus after his retirement from business. As a result, *The Orchids of the Cape Peninsula* appeared in 1888, and his two-volume *Icones Orchidearum Austro-Africanarum, Extra-Tropicarum*, comprising two hundred plates and descriptions of living plants found in South Africa, followed between 1893 and 1911. Two years after his death a third volume of a hundred plates was issued. With the help of his friend, Dr. Guthrie, he monographed the genus *Erica* for the *Flora Capensis*. In 1903 he issued, in collaboration with Major A. H. Wolley-Dod, a *List of the Flowering Plants and Ferns of the Cape Peninsula*.

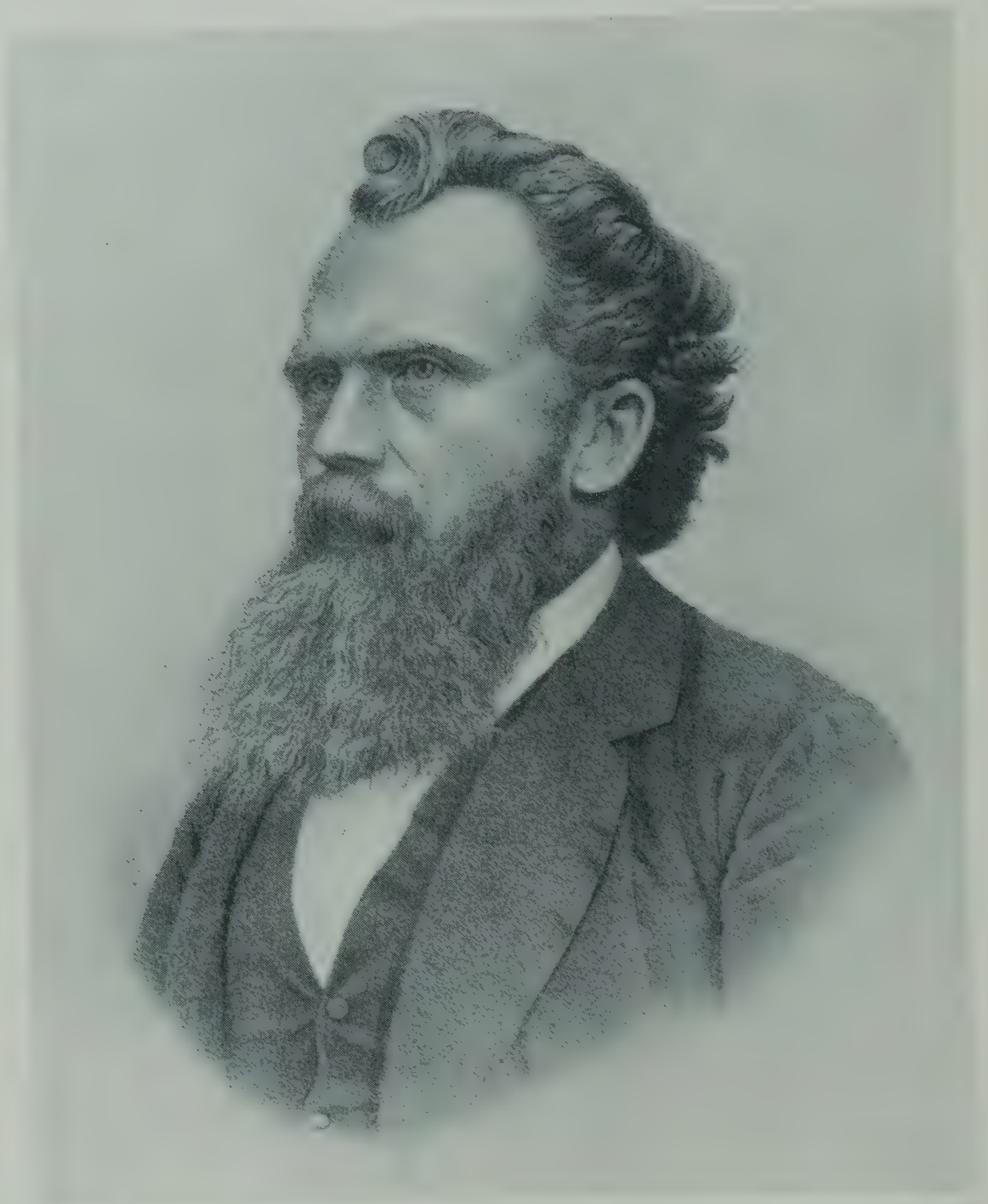
Bolus visited Kew in 1876, bringing a large collection of plants for comparison with those in the Kew Herbarium.

HARRY BOLUS (1834-1911)

He left duplicates behind, and on the return journey he had the misfortune to lose all his specimens, as well as much information gained on the visit, through the wreck of his ship the *Windsor Castle*, in Table Bay.

His enterprise was such that many fine books, some now unprocurable, became his. These included complete sets of the *Botanical Magazine*, *Botanical Register*, *Refugium Botanicum*, and the large folios of Redouté, Jacquin, Bauer, and Masson. He founded the Bolus Professorship of Botany in the Cape University, and bequeathed £48,000 for scholarships, besides leaving his rich herbarium and library to the South African College. The University conferred on him the honorary degree of D.Sc. in recognition of his scientific work and of his liberality in endowing the Professorship. He became a Fellow of the Linnean Society in 1873, and he was one of the original Members of the South African Philosophical (now the Royal) Society.

This man of the strenuous, adventurous nature was withal quiet and unassuming. Professor Pearson tells of the answer Bolus made when giving evidence before a parliamentary commission, and he was asked 'You are a botanist?' 'I do not call myself a botanist, but I have studied botany in my leisure hours.' He died at Oxted, Surrey, on the 25th of May, 1911. His name is commemorated in the genera *Bolusia*, *Bolusafra*, *Neobolusia*, *Bolusanthus*, and *Bolusiella*.



Royal Botanic Gardens, Kew.

MR. GUSTAV MANN

LATE ASSISTANT CONSERVATOR OF FORESTS, ASSAM

TO WHOM VOLUME CXXII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1896.

J. D. HOOKER.

GUSTAV MANN

(1836-1916)

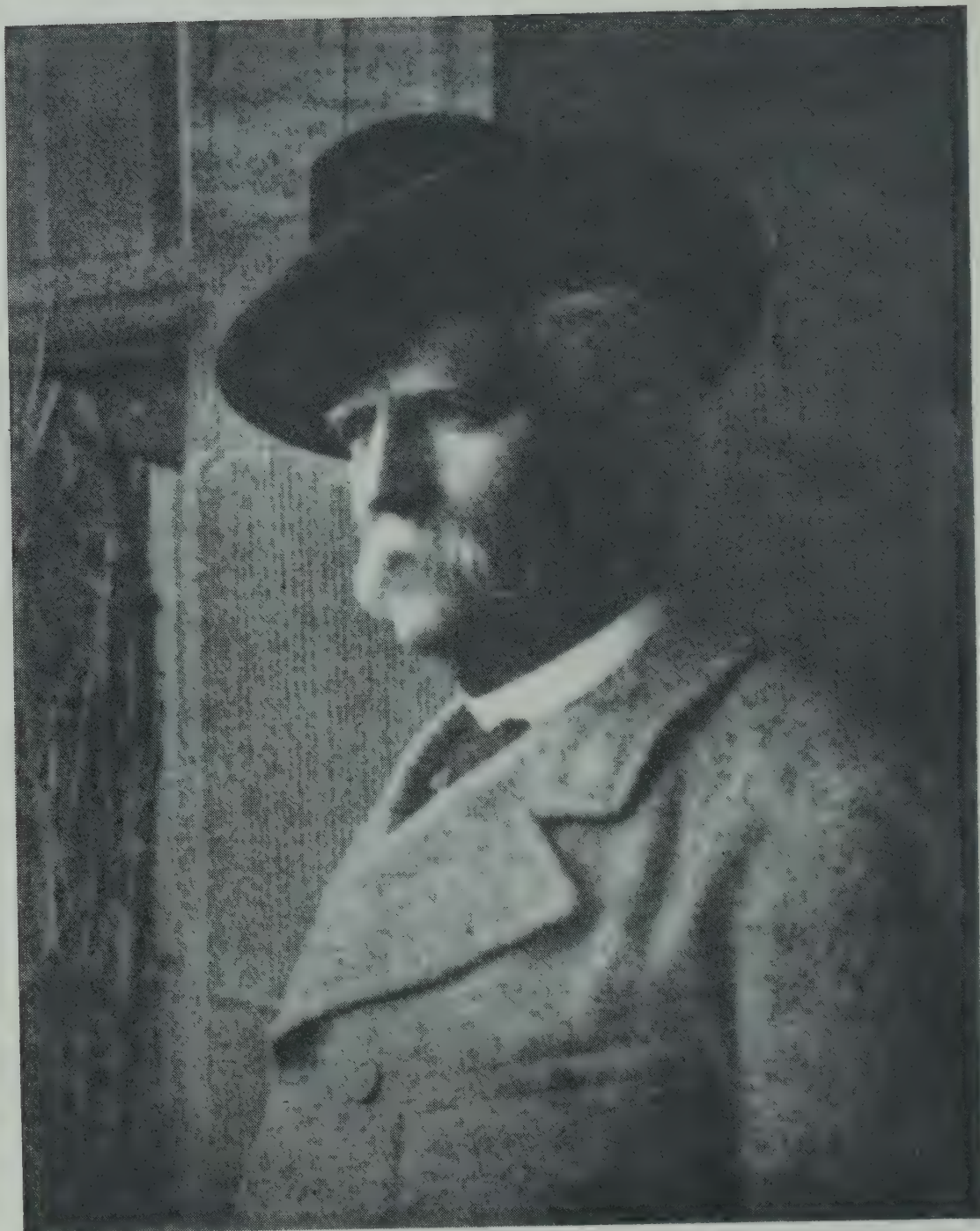
GUSTAV MANN was born at Rickensdorf, Brunswick, Germany, on the 20th of January, 1836. He was employed in the Royal Gardens at Herrenhausen in the late eighties, and subsequently went to the Botanic Garden at Hamburg, where he got to know H. G. Reichenbach, the orchidologist. From Hamburg, in April 1859, he went to Kew.

In November of that year he was appointed Botanical Collector to Baikie's Niger Expedition in succession to Charles Barter, who had fallen a victim to the climate. Mann was more fortunate, and though attacked several times by illness, his robust physique carried him through. He was unable to follow the expedition into the interior but collected plants, including a considerable number of new genera and species, in the coastal region from Old Calabar to Gaboon. Several of his palms, including new genera, are described in the *Transactions of the Linnean Society* for 1864. Among other plants collected by him, *Mannia*, a genus of *Simarubaceae*, and *Manniophyton*, referred to the *Euphorbiaceae*, commemorate his name. His name was also used by H. G. Reichenbach for a new orchid genus, *Manniella*. His pioneer ascents of the mountain peaks of the Cameroons and Fernando Po more than compensated for his failure to penetrate into the interior of the country. Although the species collected were not many in number nor rich in novelty, important new facts were revealed relating to the distribution of the mountain flora of tropical Africa. Two important papers on these results were published in the sixth and seventh volumes of the *Journal of the Linnean Society*, 1862-64. Some of Mann's tropical African plants were introduced into cultivation, and several were figured

GUSTAV MANN (1836-1916)

in the *Botanical Magazine*, including *Helichrysum Mannii*. More than a score of times he sent living plants and seeds to Kew between June, 1861, and September, 1863. Just after this he returned to England.

In November, 1863, Mann joined the Indian Forest Service, in which he had a long and active career. At first he was Assistant in the Government Cinchona Plantations at Darjeeling. Near the end of 1864 he was appointed Assistant Conservator of Forests, Bengal, and from November, 1868, he served in the Assam Forest Department. At the time of his retirement, in 1891, he was a first grade Conservator. From India he sent living plants, mainly orchids and ferns, to Kew. After his Indian service he held a post in the Bavarian Forestry Department. His death took place at Munich on the 22nd of June, 1916.



Royal Botanic Gardens, Kew.

A. B. FREEMAN-MITFORD, ESQ., C.B., F.L.S.

LATE SECRETARY H.M. OFFICE OF WORKS

TO WHOM VOLUME CXXIII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1897.

J. D. HOOKER.

ALGERNON BERTRAM FREEMAN- MITFORD

(1837-1916)

ALGERNON BERTRAM MITFORD was born in London on the 24th of February, 1837. He was at Eton from 1846 until 1854, and went up to Christ Church, Oxford, in the following year.

In 1858 he entered the Foreign Office, and five years later was attached to the Embassy at St. Petersburg. He was transferred to the Legation at Peking in 1865, and went on to Yokohama in 1866. In Japan he applied himself to the study of the language as he had done in Russia and China, and became one of the most accomplished linguists of his time. He was alone for five months during the civil war, preserving the prestige of Britain at the Japanese Court, and his life was constantly in danger from fanatics. This told upon his health and he was invalided home in 1870, returning to the Foreign Office and London society. His collected *Tales of Old Japan*, translated by him from the Japanese, appeared in 1871.

Mitford retired from the diplomatic service in 1873 and was appointed Secretary to the Office of Works.

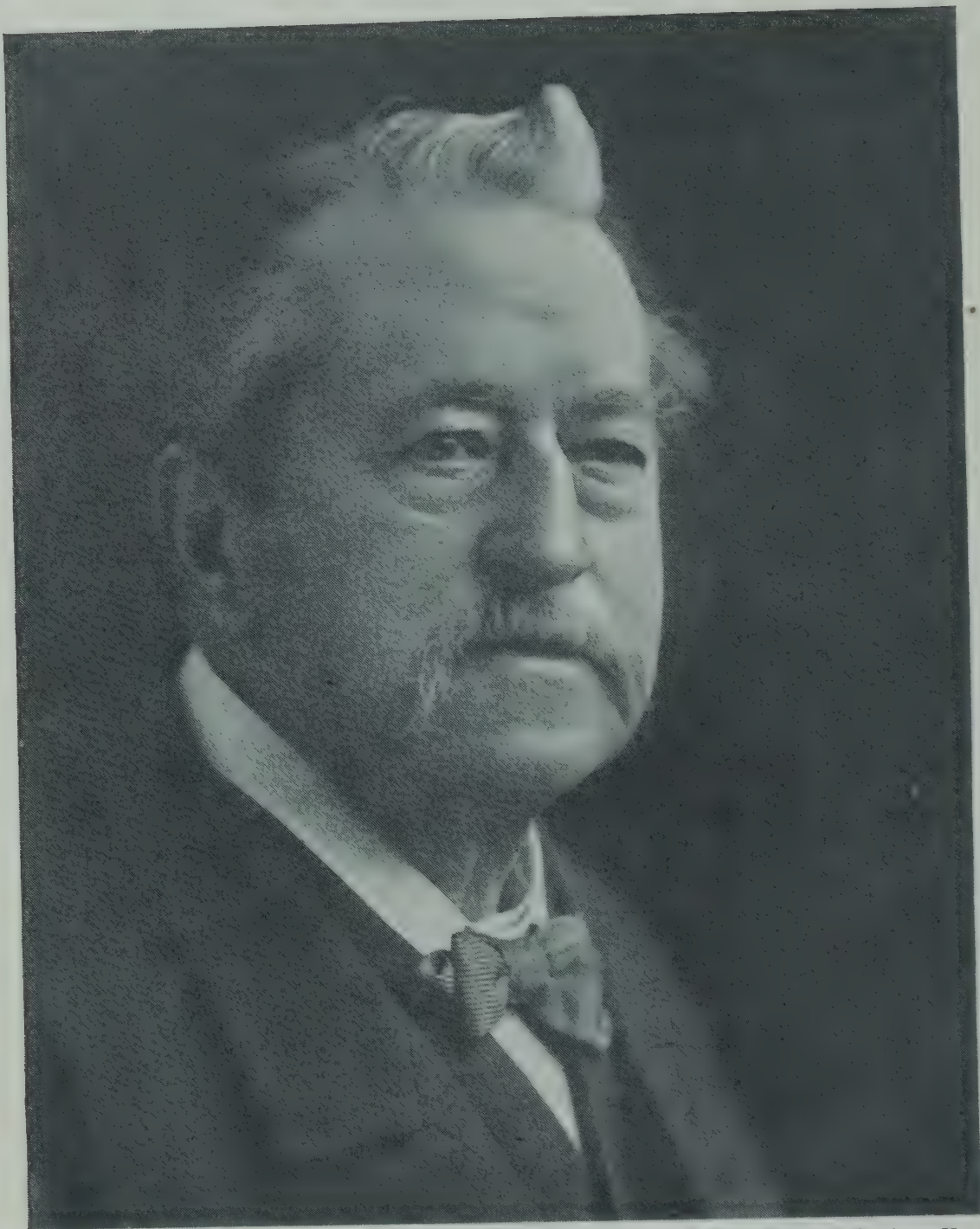
He went to live in Chelsea, a near neighbour of Whistler. He was present on the notable occasion when the famous painter slashed some of his pictures to ribands in a frenzy of rage. Disraeli, in appointing Mitford to the Office of Works, described this as 'an Augean stable, which must be swept clean.' This post Mitford held for twelve years, and initiated many improvements in the royal and public parks. Of the restorations for which he was responsible at the Tower of London he gave a fine account in *A Tragedy in Stone*, published in 1882. The duties of his post brought Mitford into close relation with Sir Joseph Hooker, Director of Kew

ALGERNON B. FREEMAN-MITFORD (1837-1916)

Gardens, who was instrumental in creating in him an ardent and abiding interest in horticulture.

In 1886 Mitford's cousin, John Thomas Freeman-Mitford, Earl of Redesdale, died and left him a considerable fortune, including Batsford Park, his estate in the Cotswolds, Gloucestershire. The earldom became extinct, but Mitford assumed the arms and the name of Freeman in addition to those of Mitford. He resigned his post, built a fine mansion at Batsford and laid out, at great cost, a magnificent garden. The cultivation of the hardy bamboos became his special hobby and his charming book, *The Bamboo Garden*, appeared in 1896. In that year he was elected a Fellow of the Linnean Society. He was awarded the Victoria Medal of Honour in 1904.

Freeman-Mitford was Conservative M.P. for the Stratford-on-Avon Division of Warwickshire from 1892 to 1895, and in 1902 was raised to the peerage as Baron Redesdale of Redesdale in Northumberland. He accompanied Prince Arthur of Connaught to Japan in 1906, and on his return, in the same year, published *The Garter Mission to Japan*, in which he dealt with the sweeping changes that had taken place in that country. In the last decade of his life Lord Redesdale wrote his autobiography, published as *Memories* in 1915. He died at Batsford Park on the 17th of August, 1916.



Royal Botanic Gardens, Kew.

WILLIAM BOTTING HEMSLEY, F.R.S., F.L.S.

PRINCIPAL ASSISTANT, HERBARIUM, ROYAL GARDENS, KEW

TO WHOM VOLUME CXXIV.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1898.

J. D. HOOKER.

WILLIAM BOTTING HEMSLEY

(1843-1924)

WILLIAM BOTTING HEMSLEY was born at East Hoathly, Sussex, on the 29th of December, 1843. Owing to delicate health he was educated at home, and after a while helped in his father's nursery.

He went to Kew Gardens at the early age of seventeen as an improver. At the end of six months he was given work in the Herbarium, returning to the Gardens in the autumn of 1862. The study of modern languages attracted him, and he and a young German colleague, Edmund Goeze, together acquired a sound knowledge of French, and in addition each in time was able to speak and write the native language of the other with some fluency. Hemsley returned to the Herbarium in less than a year as proof-reader to Bentham, who was engaged on the *Flora Australiensis*. His help is acknowledged in the preface to the first volume of the *Flora*. Hemsley gained first prize in an open botany examination in 1863. His early contributions to botanical literature appeared in Lindley and Moore's *Treasury of Botany*, 1866.

In the following year, owing to the ill-effects of a sedentary life on his delicate constitution, he was forced to resign his post, and he went home to spend a season studying the flora of Sussex. He also prepared an English adaptation of Decaisne and Naudin's *Manuel de l'Amateur des Jardins*, entitled *Handbook of Hardy Trees, Shrubs and Herbaceous Plants*, which was published in 1873 and reissued in 1877.

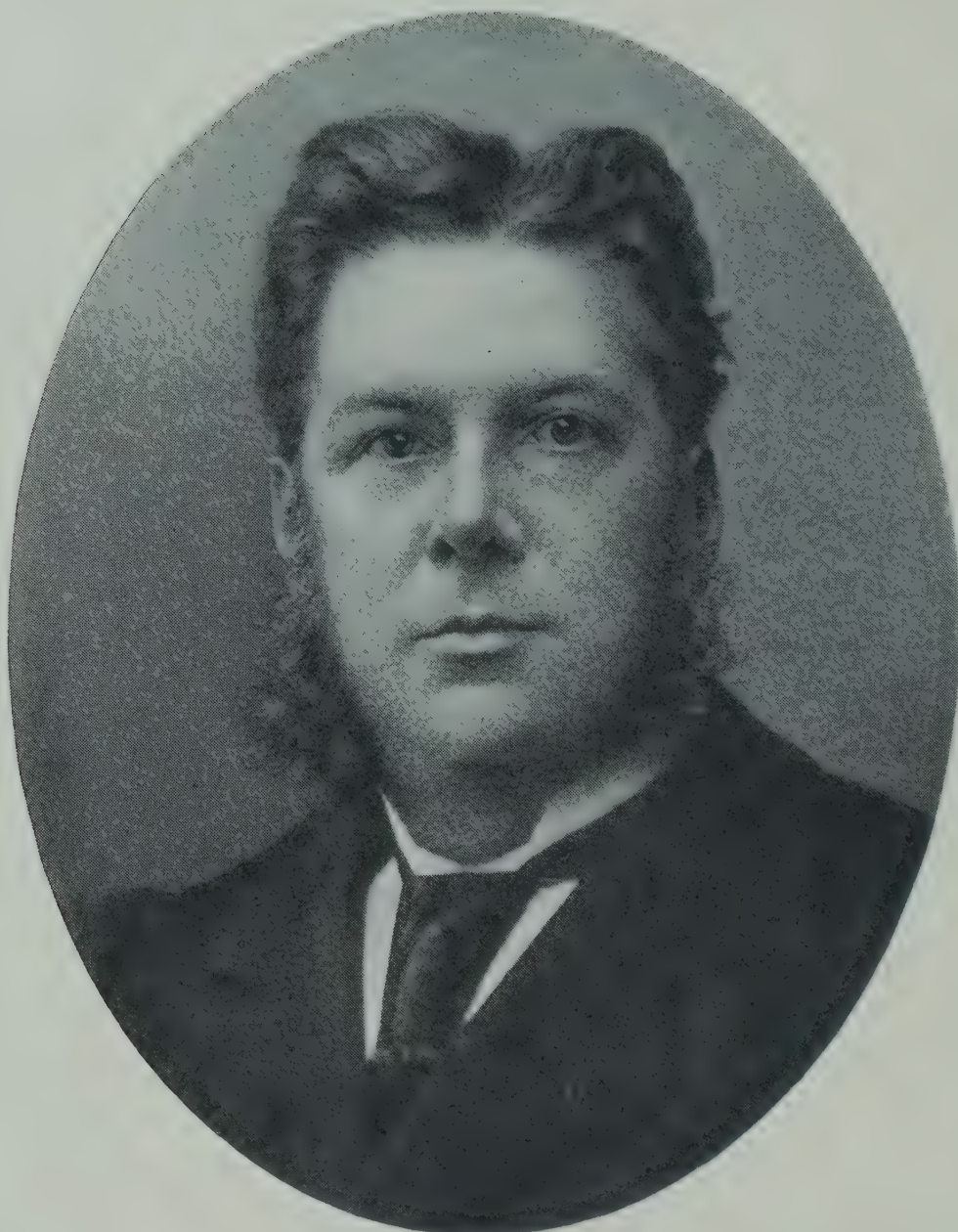
His health improving, Hemsley returned to Kew as a visitor. He contributed to a new edition of Thompson's *Gardener's Assistant*, 1878, and his descriptive catalogue of Miss Marianne North's paintings of plants, exhibited at Kew, appeared in 1882. The Royal Horticultural Society

WILLIAM BOTTING HEMSLEY (1843-1924)

appointed him Lindley Librarian in 1875, and in the same year he was elected an Associate of the Linnean Society. He became a Fellow in 1896. A work, in conjunction with J. E. T. Aitchison, on the flora of the Kuram Valley, in Afghanistan, led to Hemsley's reappointment as Assistant for India in 1883. His Report on the Botany of the voyage of *H.M.S. Challenger* was issued in 1885. Hemsley was also responsible for the botanical section of the *Biologia Centrali-Americana*, 1879-88. The completion of the five volumes of this work was followed by his being elected a Fellow of the Royal Society in 1889. Besides work on insular floras he prepared, with F. B. Forbes, an *Index Florae Sinensis*, which was published in the *Journal of the Linnean Society*, 1886-1905. In 1890 he rejoined the civil service as Principal Assistant at the Kew Herbarium, and in 1899 became Keeper of the Herbarium and Library. His retirement came in 1908. He was awarded the Victoria Medal of Honour in 1909, and received the honorary degree of LL.D. of Aberdeen University in 1913. *Hemsleya chinensis*, a species of *Cucurbitaceae*, was so named in his honour by A. Cogniaux in 1889.

During 1903-04 Hemsley was co-editor with Sir Joseph Hooker of the *Botanical Magazine*. He wrote a history of the *Magazine* from its foundation in 1787, with an index to all the plants figured during 1787-1904. This he supplemented in 1915 with an account of the work of the famous botanical artist, Walter Hood Fitch.

Dr. Hemsley died at Broadstairs, Kent, on the 7th of October, 1924. He was a man who, though handicapped throughout his life by ill-health, gathered a vast store of knowledge, and did much to advance the cause of natural science.



Royal Botanic Gardens, Kew.

TO THE MEMORY OF MY LATE FRIEND
HENRY LÉVÊQUE DE VILMORIN

OF VERRIÈRES-LE-BUISSON, PARIS

I DEDICATE VOLUME CXXV.

THE CAMP, SUNNINGDALE,
DECEMBER, 1899.

J. D. HOOKER

HENRY LÉVÊQUE DE VILMORIN

(1843-1899)

CHARLES HENRY PHILIPPE LÉVÊQUE DE VILMORIN was born in Paris on the 26th of February, 1843. He was the fourth in a line of great agriculturists and horticulturists, heads, in succession, of the world-famed nursery firm, Vilmorin-Andrieux et Cie.

He received a good classical education and, in addition, studied modern languages, especially English, German, and Italian. At the early age of eighteen, following his father's death, he entered the business and began to take up the study of the kindred sciences, agriculture and horticulture. In 1866 he visited England to increase his knowledge of the language, and also to make himself acquainted with the English educational and commercial institutions which had a direct bearing upon the subject which he was interested in promoting. In addition to visiting most of the European countries, he journeyed to North America, Algeria, Tunis, and Egypt. His visit to the United States in 1893 was as delegate of the Société des Agriculteurs de France, in order to study methods of cultivation there. He botanized in the Pyrenees, where he sometimes spent a holiday, and he was familiar with the flora of Auvergne.

The experimental work begun by his father was continued by Henry de Vilmorin, whose studies on the cross-breeding of wheats led to the publication, in 1880, of that fine book, *Les Meilleurs Blés*. In 1886 he published a second edition of his father's *Catalogue Méthodique et Synonymique des Principales Variétés de Pommes de Terre*, to which he added over two hundred varieties, classified and including all known forms. His researches in beets continued from 1875 to 1889, and contributed largely to the development of the saccharine properties of these important plants. Among

HENRY LÉVÊQUE DE VILMORIN (1843-1899)

other of his published works there appeared, in 1896, one on the history and culture of the chrysanthemum. In collaboration with his brother, Maurice, he thoroughly revised the illustrated work, *Les Fleurs de Pleine Terre*. His *Flowers of the French Riviera* appeared in the *Journal of the Royal Horticultural Society* in 1893.

Vilmorin participated in the Botanical and Horticultural Conference held at the great French Exhibition of 1889, and was the delegate of the French Government to the International Exhibition at St. Petersburg in the year of his death. In 1881 he was appointed Vice-President of the Société Botanique de France and in 1889 became President. He was the first Vice-President of the Société Nationale et Centrale d'Horticulture, and he founded the Société des Agriculteurs de France.

Many distinctions were bestowed upon him, and they came from nearly every European country. France made him Officier de la Légion d'Honneur in 1882, and in England he was the recipient of the Veitch Memorial Medal in 1896. He died on the 24th of August, 1899, at Verrières-le-Buisson, Seine-et-Oise, France.



Courtesy of W. Cuthbertson, Esq.

MAJOR DAVID PRAIN, M.B., F.R.S.E., F.L.S.
SUPERINTENDENT OF THE ROYAL BOTANIC GARDENS, CALCUTTA

TO WHOM VOLUME CXXVI.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1900.

Jos. D. HOOKER.

MAJOR DAVID PRAIN

(1857-)

DAVID PRAIN was born at Fettercairn, Kincardineshire, on the 11th of July, 1857. From Fettercairn Parish School he went to the Grammar School at Aberdeen and eventually entered Aberdeen University, where he graduated M.A., with honours in science, in 1878. In the same year he became a master at Ramsgate College, a position he held until, in 1880, he returned to Scotland to study medicine at the Universities of Aberdeen and Edinburgh, obtaining his M.B. with highest honours in 1883. He was Demonstrator of Anatomy at the College of Surgeons, Edinburgh, in 1882 and 1883, and at the University of Aberdeen in 1883 and 1884.

In October, 1884, he entered the Indian Medical Service, and was attached to various native regiments until 1887, when he was appointed Curator of the Herbarium and Library of the Royal Botanical Garden, Calcutta. He held this position until 1898, when he succeeded Sir George King as Superintendent of that establishment, and of Cinchona Cultivation in Bengal, and as Director of the Botanical Survey of India. These posts he held until 1905; from 1895 until 1905 he was Professor of Botany at the Medical College of Calcutta. Among other positions held by him in 1898 was that of a Trustee of the Indian Museum, an office he retained until 1907. He became a Major in the Indian Medical Service in 1896 and a Lieutenant-Colonel in 1904.

On the retirement of Sir W. T. Thiselton-Dyer, in 1905, Prain was appointed Director of the Royal Botanic Gardens, Kew. His high botanical and administrative attainments during the period of his directorship, the most important position of its kind in the Empire, secured for him permanent

MAJOR DAVID PRAIN (1857-)

fame. The honour of C.I.E. was bestowed upon him in 1906, and C.M.G. with a knighthood in 1912. He was made a Knight of the Royal Swedish Order of the Polar Star in 1908 and a Commander of the Belgian Order of Leopold II. in 1919. He relinquished the post to Dr. (afterwards Sir) A. W. Hill in 1922. From 1922 to 1925 Sir David was Director of Forest Products Research. He has been Chairman of the Council, John Innes Horticultural Institution, since 1910, a Carnegie Trustee for the Universities of Scotland since 1917, Trustee of the British Museum since 1924, and Chairman of the Advisory Council for Plant and Animal Products, Imperial Institute, since 1926.

Sir David has contributed many monographs and papers to botanical and other journals and made journeys in Bengal, Assam, Sikkim, Tibet, Burma, Madras, the Andaman and Nicobar Islands. His two-volume work, *Bengal Plants*, was published in 1903. He edited the *Botanical Magazine* from volume 133 (1907) to volume 146 (1920); the *Flora of Tropical Africa*, volume vi., section 2 (1916-17), and volume ix. (not yet completed) begun in 1917; has edited *Hooker's Icones Plantarum* since 1906, volume xxix.; and was responsible for *Supplements* III.-V. (1908-21) of the *Index Kewensis*. He was editor also during 1898-1904 of the *Annals of the Royal Botanic Garden, Calcutta*.

In 1900 he was given the degree of LL.D. by Aberdeen University, and in that year he became a Fellow of the University of Calcutta; the degree of LL.D. of St. Andrews University was conferred upon him in 1911. He has been a Fellow of the Linnean Society since 1888, and was President from 1916 to 1919. He was elected a Fellow of the Royal Society in 1905, and was Treasurer from 1919 to 1929. From the Royal Horticultural Society he received the Victoria Medal of Honour in 1912. He was the recipient of the Barclay Medal of the Asiatic Society of Bengal, 1909, and the Albert Medal of the Royal Society of Arts, 1925. The genus *Prainea* was named in his honour by George King in 1888.



Courtesy of Countess Cawdor

THE HONOURABLE CHARLES ARTHUR ELLIS, F.L.S.

OF FRENSHAM HALL, SHOTTERMILL, HASLEMERE

TO WHOM VOLUME CXXVII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1901.

JOS. D. HOOKER.

HON. CHARLES ARTHUR ELLIS

(1839-1906)

CHARLES ARTHUR ELLIS, born at Lisbon on the 14th of December, 1839, was a son of Lord Howard de Walden, the sixth Baron, who was a distinguished diplomatist. Ellis was educated at Harrow and Merton College, Oxford, and, after graduating, qualified as a barrister of the Inner Temple. He became very fond of natural history early in life and made a large collection of living animals.

In 1861-62, under exceptionally favourable conditions, he was able to gratify his desire to travel. The commander of the *Ariadne*, the ship which escorted the Prince of Wales, afterwards King Edward VII., on a visit to America, invited Ellis to be his guest. After landing he remained attached to the Prince's retinue, which toured Canada and the United States. In later years, with rod and gun, he journeyed farther to the west, devoting several seasons to hunting the big game of the Rocky Mountains. Other parts of the New World which he visited were Mexico and British Guiana.

Africa, with its wonderful natural resources, next attracted him, and with a professional hunter named John Dunn he was able to penetrate into parts of the continent which were still teeming with big game. During this trip he had the misfortune to be mauled by a crocodile.

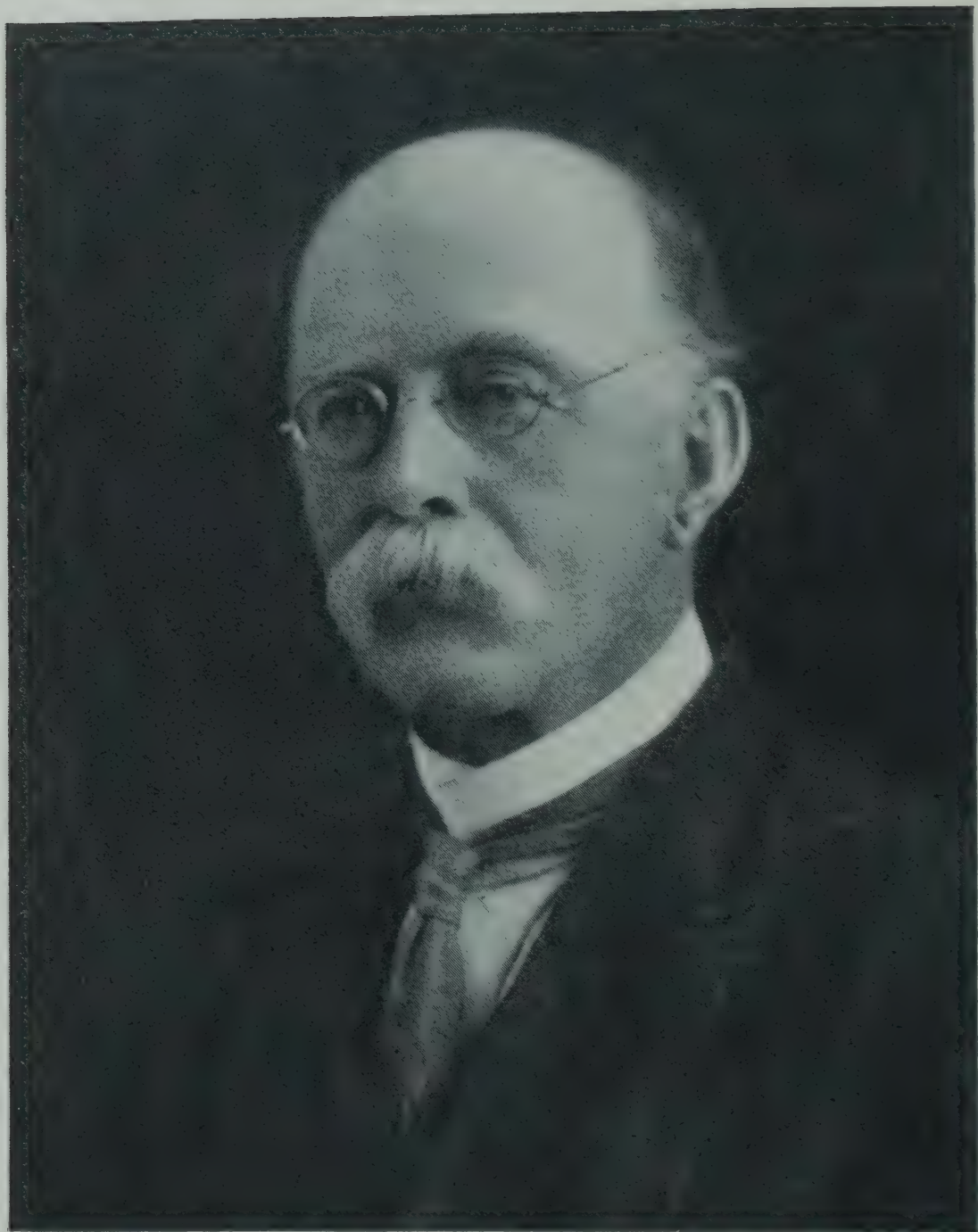
India was visited in 1882, and from there Ellis made an expedition into eastern Turkestan. On his journey home he visited Japan, some of the South Sea Islands and New Zealand.

Laden with spoils, he laid aside his gun and rod and built a large house, Frensham Hall, near Haslemere, to house the trophies and other objects of interest which he had collected. Here he gathered his friends around him and

HON. CHARLES ARTHUR ELLIS (1839-1906)

recounted his adventures in foreign lands. The house was erected on the top of a ridge, and on the surrounding slopes he began to cultivate a great number of hardy plants, including a fine collection of trees and shrubs. Some of these are now among the largest specimens in the country. In the low-lying portion of his domain he made ponds for such species of fishes, frogs, and tortoises as would thrive in the English climate. To keep plants or animals under artificial conditions had no attraction for him. Watching the development of his trees and the habits of his aquatic animals formed a delightful hobby for his later years. He corresponded with many people, interested in gardening and botany, in all parts of the world. He was a very generous gardener and shared the plants from his garden with his many friends.

Ellis was elected a Fellow of the Linnean Society in 1897. He died on the 30th of March, 1906.



Courtesy of the late Dr. A. Henry.

AUGUSTINE HENRY, ESQ., M.A., L.R.C.P. EDIN., F.L.S.

LATE OF THE CHINESE IMPERIAL MARITIME CUSTOMS

TO WHOM VOLUME CXXVIII.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1902.

JOS. D. HOOKER.

AUGUSTINE HENRY

(1857-1930)

AUGUSTINE HENRY was born on the 2nd of July, 1857. He came of an old County Derry family. In 1878 he graduated M.A. of Queen's University of Ireland and in the following year passed the University examination in medicine. He was also L.R.C.P. of Edinburgh. In 1881 he was appointed medical officer and assistant in the Imperial Maritime Customs Service of the Chinese Government.

For some years his official duties took him into many parts of China hitherto unexplored, and he learned to speak Chinese fluently. After spending about twelve months at Shanghai he was transferred to Ichang, where he remained for seven years. It was during this period that he began seriously to study the flora of China. His first collection, from the province of Hupeh, containing many new genera and species, was sent to Kew in 1886. Obtaining leave of absence for six months he spent the whole of that time in an investigation of the flora of Hupeh. His plants from that province contained about five hundred undescribed species and twenty new genera. It was here that he saw the famous flowering tree, *Davidia involucrata*, seeds of which were subsequently brought home by E. H. Wilson.

Henry spent a year at home between 1889 and 1891, studied for the bar and became a member of the Middle Temple.

Returning to China in 1891, he was soon afterwards sent to Formosa, where he remained for two years, made a collection of two thousand plants and published the first account of the flora.

He was next stationed in southern Yunnan, and during a stay of several years he botanized in a country which was richer in new plants than any he had hitherto explored.

Kew's share of Henry's Chinese plants amounted to over 158,000 specimens. These contained more than six thousand distinct species, of which nearly a thousand were new

AUGUSTINE HENRY (1857-1930)

to science, and they included between thirty and forty new genera.

Horticulture, too, owes Dr. Henry a great debt. A considerable number of novelties was introduced by him, including *Lilium Henryi* and *Vitis Henryana*. These results induced great horticultural firms in England, as well as the Arnold Arboretum and the United States Department of Agriculture, to send collectors to China.

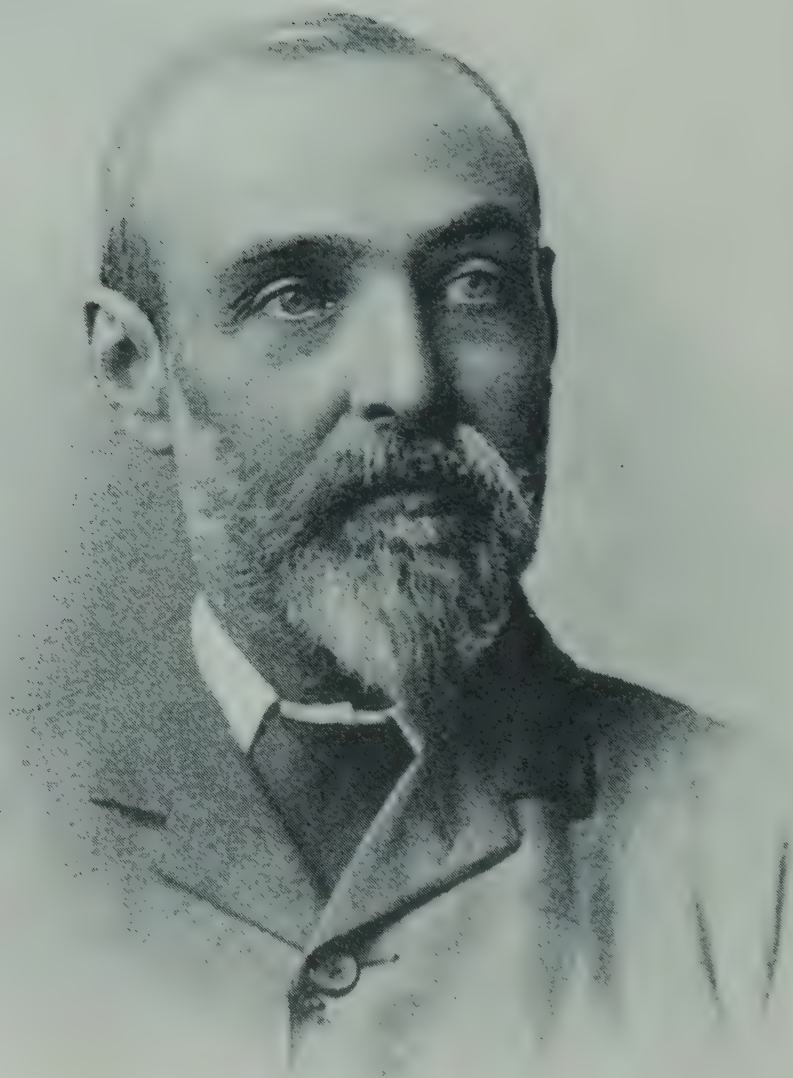
In 1900 he returned to Europe and took up the study of forestry. He spent nearly two years at the National School of Forestry, Nancy, and travelled extensively, investigating the conditions of wild and cultivated forests.

From 1903 onwards he was engaged, in collaboration with H. J. Elwes, on *The Trees of Great Britain and Ireland*, an exhaustive work in seven volumes, 1906-13. Henry's other important publications include *Forests, Woods and Trees in relation to Hygiene*, 1919, which contains an account of the water-catchment areas of the British Isles as suitable for reafforestation.

In 1907 Cambridge University instituted a readership in forestry, to which Henry was appointed. Under his control the School of Forestry at Cambridge developed, and he carried out experimental work on the breeding and hybridization of trees.

He was Professor of Forestry in the College of Science, Dublin, from 1913 to 1922, when he was transferred to the same post in the University College, Dublin, on the College of Science being absorbed by the National University of Ireland. He retired in 1926.

The degree of M.A. *honoris causa* was conferred on him by Cambridge University in 1908. He was elected a Fellow of the Linnean Society in 1888, became a member of the Scientific Committee of the Royal Dublin Society, and was elected to the Royal Irish Academy in 1907. He was awarded the Veitch Memorial Medal in 1902 and the Victoria Medal of Honour in 1906. His death took place in Dublin on the 23rd of March, 1930. He is doubly commemorated in a plant to which Hemsley gave the name *Neohenrya Augustiniana* in 1892.



Journal of Botany.

GEORGE NICHOLSON, ESQ., F.L.S.

LATE CURATOR OF THE ROYAL GARDENS, KEW

TO WHOM VOLUME CXXIX.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1903.

JOS. D. HOOKER.

GEORGE NICHOLSON

(1847-1908)

GEORGE NICHOLSON was born at Ripon, Yorkshire, on the 7th of December, 1847. At an early age, following a grammar school education, he commenced his career in his father's nursery, afterwards working in others in England and France.

When twenty-six Nicholson chanced to see an advertisement for a Clerk to the Curator of the Royal Gardens, Kew. There was no time to prepare specially for the necessary examination, but he was the successful one of the five applicants. The curatorship became his in 1886, a post he held until 1901, when serious illness caused his retirement.

In the year following Nicholson's arrival at Kew he began to prepare a *Wild Flora of Kew Gardens and Pleasure Grounds*, which appeared in the *Journal of Botany* in 1875. This was reissued in *Additional Series V of the Kew Bulletin*, 1906. Before he became Curator of Kew, Nicholson was an enthusiastic student of the British flora, and edited the *Reports of the Botanical Exchange Club* for 1883 and 1887. His fine British herbarium went eventually to Aberdeen University. His greatest work is the *Illustrated Dictionary of Gardening*, 1884-88. To this standard work of reference a *Supplement* was issued in 1900-01. He contributed many papers to the *Gardeners' Chronicle* and to the *Garden*, of which volume forty-eight was dedicated to him.

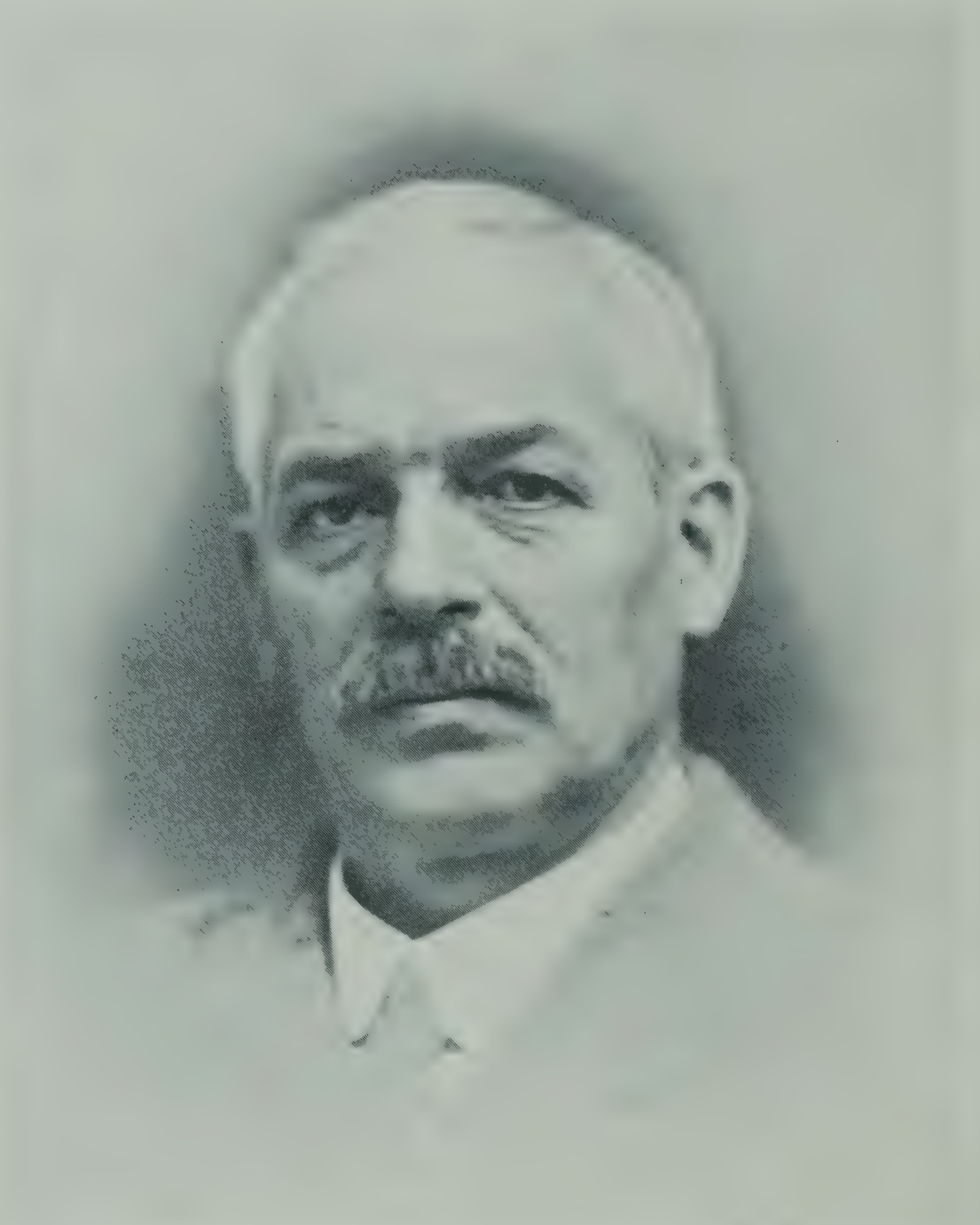
He visited America in 1893 to act as judge of the horticultural section of the Chicago Exhibition, and this enabled him to spend several months in the study of American trees. The knowledge gained was of great service to the Kew Arboretum, then under Nicholson's special care. The *Handlist of Trees and Shrubs* in this collection was prepared

GEORGE NICHOLSON (1847-1908)

by him in 1894-96. The Royal Horticultural Society appointed him Delegate to the Horticultural Society of New York on the occasion of the Conference on Plant Breeding and Hybridism in 1902.

Elected an Associate of the Linnean Society in 1886, he became a Fellow in 1898. In 1894 he was awarded the Veitchian Medal of the Royal Horticultural Society, and was one of the original sixty recipients of the Victoria Medal of Honour on its institution in 1897. Among the plants named in his honour are the doubly commemorative *Neonicholsonia Georgei*, a palm, and *Fissidens Nicholsoni*, a moss described from specimens on a tree fern in a Kew Gardens greenhouse.

Near the close of his life Nicholson returned to the investigation of the flora and fauna of Kew Gardens, particularly the fungi and lepidoptera. He collected five hundred species of fungi, several of which were new to science. His death took place at Richmond, Surrey, on the 20th of September, 1908.



Courtesy of Mrs. Watson.

WILLIAM WATSON, A.L.S., F.R.H.S.

CURATOR, ROYAL BOTANIC GARDENS, KEW

TO WHOM VOLUME CXXX.

IS DEDICATED

THE CAMP, SUNNINGDALE,
DECEMBER 1, 1904.

Jos. D. HOOKER.

WILLIAM WATSON

(1858-1925)

WILLIAM WATSON was born at Garston, Liverpool, on the 13th of March, 1858. His school life was followed by several years spent in nursery establishments, and from one of these he went to Kew in 1879 as Foreman of the Propagating Department. In 1886 he was appointed Assistant Curator, and succeeded George Nicholson as Curator in 1901. This position he held until June, 1922. He proved a very able henchman to Sir W. T. Thiselton-Dyer, who became Director in 1885, in the revival of Kew as a horticultural, as distinct from a botanical, establishment. His knowledge of plants, especially those grown under glass, was probably unrivalled. Rhododendrons fascinated him, and his enthusiasm for succulents in his later years led to the building up of a very fine collection of these plants at Kew.

Thanks to a literary bent, he early became one of the leading contributors to horticultural journals. During its short life he was the English correspondent of the American *Garden and Forest*, and for many years he was garden editor of the *Field*. His *Cactus Culture for Amateurs* became a standard book. An edition of Thompson's *Gardener's Assistant*, for which he was responsible, was so well done as to constitute practically a new work. Other of his books were, *Rhododendrons and Azaleas*, *Climbing Plants*, and (with W. J. Bean) *Orchids, Their Culture and Management*.

Watson had much to do with the founding of the Kew Guild and became the first editor of its *Journal*. He created the British Gardeners' Association, and he was for twenty years Chairman of the Kew Gardeners' Mutual Improvement Society. He was elected an Associate of the Linnean Society in 1904 and was awarded the Victoria Medal of

WILLIAM WATSON (1858-1925)

Honour in 1916. He had received the Veitch Memorial Medal in 1891 following his hybridizing of *Streptocarpus*.

In a letter to Watson, on the occasion of the dedication to him of a volume of the *Botanical Magazine*, Sir Joseph Hooker wrote of the 'skill and knowledge which you have devoted to raising and flowering an unprecedentedly large proportion of the rare, interesting and beautiful plants portrayed in the last twenty volumes of the Magazine, and . . . the valuable information which you have so often given me of the habits, history and mode of culture of these and of many other species whose portraits accompany them.'

After his retirement Watson helped in the preparation of the grounds of the Wembley Exhibition. His death took place at St. Albans, Hertfordshire, on the 30th of January, 1925.



Courtesy of Lady Thiselton-Dyer

TO MY WIFE
HARRIET, LADY THISELTON-DYER

I DEDICATE VOLUME CXXXI.
(THE FIRST VOLUME OF THE FOURTH SERIES)

W. T. T.-D.

HARRIET, LADY THISELTON-DYER

(1854-)

HARRIET ANN HOOKER, afterwards Lady Thiselton-Dyer, was the second child and eldest daughter of Sir Joseph Dalton Hooker, the renowned botanist and for many years Director of the Royal Botanic Gardens, Kew. On her mother's side she was a granddaughter of the Rev. J. S. Henslow, at one time Professor of Botany in the University of Cambridge and Rector of Hitcham, Suffolk, and it was at her grandfather's rectory that she was born on the 23rd of June, 1854. By inheritance and environment her life must have been much influenced towards a deep interest in the activities of the botanical world. In early life she had a longing to become a botanical artist, and possibly, had she not been precluded by her social and other duties as the daughter of one Director of Kew and the wife of his immediate successor, she would have made for herself a career in delineating plants for which she possessed much natural ability. She received some tuition from W. H. Fitch, one of the greatest botanical artists of his time, on whom for many years her father, as editor of the *Botanical Magazine*, had depended for illustrations.

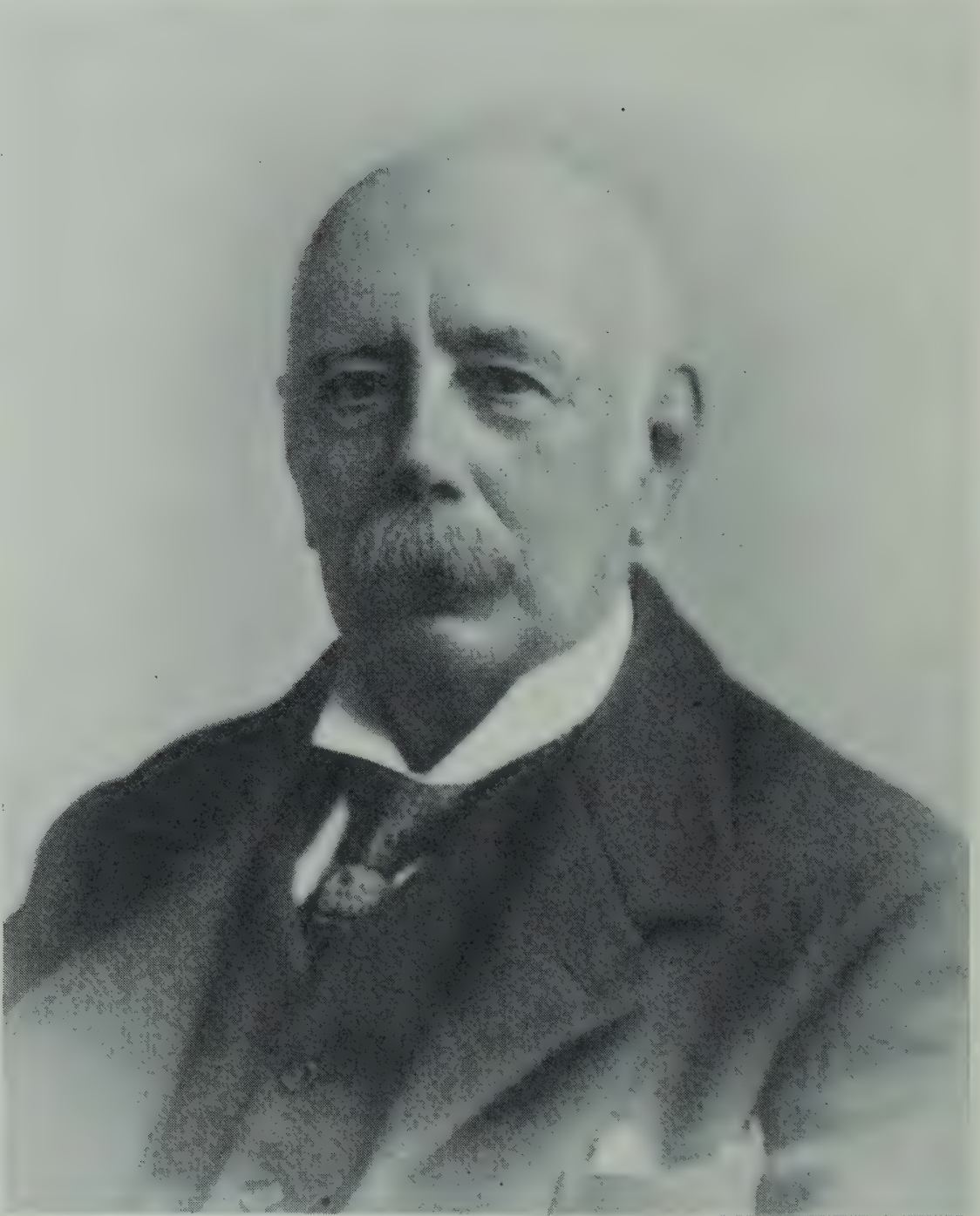
Miss Hooker was married to Mr. W. T. Thiselton-Dyer, then Assistant Director, afterwards Director, of Kew, on the 23rd of June, 1877. It was shortly after her marriage that Fitch, owing to disagreement with the editor, withdrew at short notice his services as artist to the *Botanical Magazine*. There were but few illustrations in hand to carry on the work. A position of some difficulty was relieved by Sir Joseph Hooker's turning to his eldest daughter for assistance. This was given, often at great inconvenience to herself, sometimes during periods of illness when she was unable to leave her bed. But the new artist did not spare

HARRIET, LADY THISELTON-DYER (1854-)

herself. The whole of one Christmas Day was spent in preparing a difficult drawing. On another occasion a plant to be drawn was brought to her just as she was about to leave home for a holiday in Switzerland and necessitated considerable delay in her departure. It is difficult to estimate how much depended on Mrs. Thiselton-Dyer during this critical time. Had she not been available willingly and skilfully to assist the editor, delay in publication, possibly even suspension, of the *Botanical Magazine* might have occurred. She largely saved the situation, and therefore it was fitting that of the two among the many artists of the *Magazine* who have been honoured by having volumes dedicated to them one should be Lady Thiselton-Dyer 'whose skilful pencil has contributed to it many illustrations.' These number nearly ninety. The first, *Hoodia Bainii*, a new asclepiadaceous plant from South Africa, appeared in 1878, and the last, *Bulbophyllum Ericssoni*, was published in 1906. Most of them are in the volumes for 1878 and 1879.

We owe to Lady Thiselton-Dyer the fine illustration of the beautiful *Magnolia stellata*, plate 6370, 1878, then newly introduced, *Crinum Macowani*, *Dendrobium Brymerianum*, and *Primula rosea*, which is referred to as 'the most attractive novelty of the spring horticultural shows of the present year' (1879).

Other of her published work includes twelve of the excellent plates in I. B. Balfour's *Botany of Socotra*, 1888. She has contributed a few illustrations to the *Gardeners' Chronicle*, and many of her original drawings are preserved in the Herbarium at Kew.



Courtesy of H. N. Ridley, Esq

HENRY NICHOLAS RIDLEY, M.A., F.L.S.

DIRECTOR, BOTANIC GARDENS, SINGAPORE

TO WHOM VOLUME CXXXII.

IS DEDICATED

HENRY NICHOLAS RIDLEY

(1855-)

HENRY NICHOLAS RIDLEY, son of the Rev. Oliver Matthew Ridley, was born at West Harling, Norfolk, on the 10th of December, 1855. He was educated at Haileybury School and Exeter College, Oxford, where he obtained honours in science in 1877, and gained the Burdett-Coutts Geological Scholarship. He proceeded M.A. in 1882.

From 1880 to 1887 he served as Assistant in the Botanical Department of the British Museum, having charge of the Monocotyledons, and spending his leisure in the study of the British flora and his holidays collecting plants in southern Ireland, Norway, and Switzerland. With two others, in 1887, he undertook an expedition to Fernando de Noronha, Brazil, to investigate the flora, fauna, and minerals of that island. An account of their collections, which are in the British Museum, appeared in the *Journal of the Linnean Society* in 1890.

Ridley was appointed Director of Gardens and Forests in the Straits Settlements in 1888, with headquarters in Singapore. At that time little was known of the Malayan flora and Ridley began to study it intensively, making expeditions to all parts of the peninsula and also visiting Java, Sumatra, Borneo, and the Cocos and Christmas Islands. Herbarium specimens, of which he distributed about two thousand a year, were sent to Kew, the British Museum, the Royal Botanic Garden at Calcutta, and elsewhere, while a good herbarium was formed at Singapore. Of the living plants which he brought back at the same time some were sent to Kew and others grown in the Singapore gardens. These gardens soon ranked among the richest of their kind. Four hundred species of palms were cultivated there and aroids also were well represented. Foliage plants such as

HENRY NICHOLAS RIDLEY (1855-)

codiaeums, cordylines and calatheas formed a strong feature. Plants and seeds were distributed annually, locally and to all other parts of the world.

The greatest event in Ridley's career was his working out, while at Singapore, of a method of tapping Para rubber trees which led to the successful foundation of the industry. This, and his persistent efforts to persuade sceptical planters that they ought to grow rubber, led to the gigantic development of the plantation rubber industry throughout the eastern tropics.

A large amount of his time was occupied with herbarium work. He edited, and was chief contributor to, the *Agricultural Bulletin of the Straits Settlements and Federated Malay States*, and was Secretary to the Straits Branch of the Royal Asiatic Society and editor of its *Journal* from 1889 to 1911.

After his retirement in 1912 Ridley made more expeditions to the tropics. The total of his herbarium specimens amounted to about fifty thousand, of which a large number was previously unknown to science.

His more important publications include *Materials for a Flora of the Malayan Peninsula, Monocotyledons*, in three volumes, published in 1907-08; *Spices*, in 1912; the *Flora of the Malay Peninsula*, five volumes, in 1922-25; and the *Dispersal of Plants throughout the World*, a work of 744 pages, 1930. In addition to these and other works he has contributed many papers on botany and other subjects to various scientific journals.

His services were recognised by the honour of Companion of the Order of St. Michael and St. George in 1911, and in 1928 the United States Department of Agriculture awarded him the Frank N. Meyer Medal for his work in establishing the Para rubber tree in the oriental tropics. He also received a gold medal from the Rubber Growers' Association. Schlechter gave the name *Ridleyella* to a genus of orchids, and O. Kuntze also commemorated him in *Ridleyinda*. He was elected a Fellow of the Linnean Society in 1881 and of the Royal Society in 1907.



Courtesy of Miss Willmott.

MISS E. A. WILLMOTT, F.L.S., V.M.H.

OF WARLEY PLACE, ESSEX

TO WHOM VOLUME CXXXIII.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1907.

ELLEN ANN WILLMOTT

MISS WILLMOTT is the fourth generation of amateur gardeners in her family, and to her great satisfaction her nephew, Mr. Berkeley of Spetchley, is carrying on the tradition to a fifth generation. Warley Place was for a time one of the homes of John Evelyn, diarist, and he was writing *Silva* whilst it was in his possession. Some of the trees, the large *Ilex* and the Spanish chestnuts, were already in the garden, planted by his wife's relatives the Flemings.

Unfortunately, the Cedar of Lebanon he had planted was blown down during a terrific gale in the last century, and the walnut and the giant mulberry shared the same fate about 1840, the giant elms later. The gardening tradition has always persisted at Warley.

Miss Willmott began gardening at a very early age and she has continued to be greatly interested, both botanically and horticulturally, combining the two in an unusual manner.

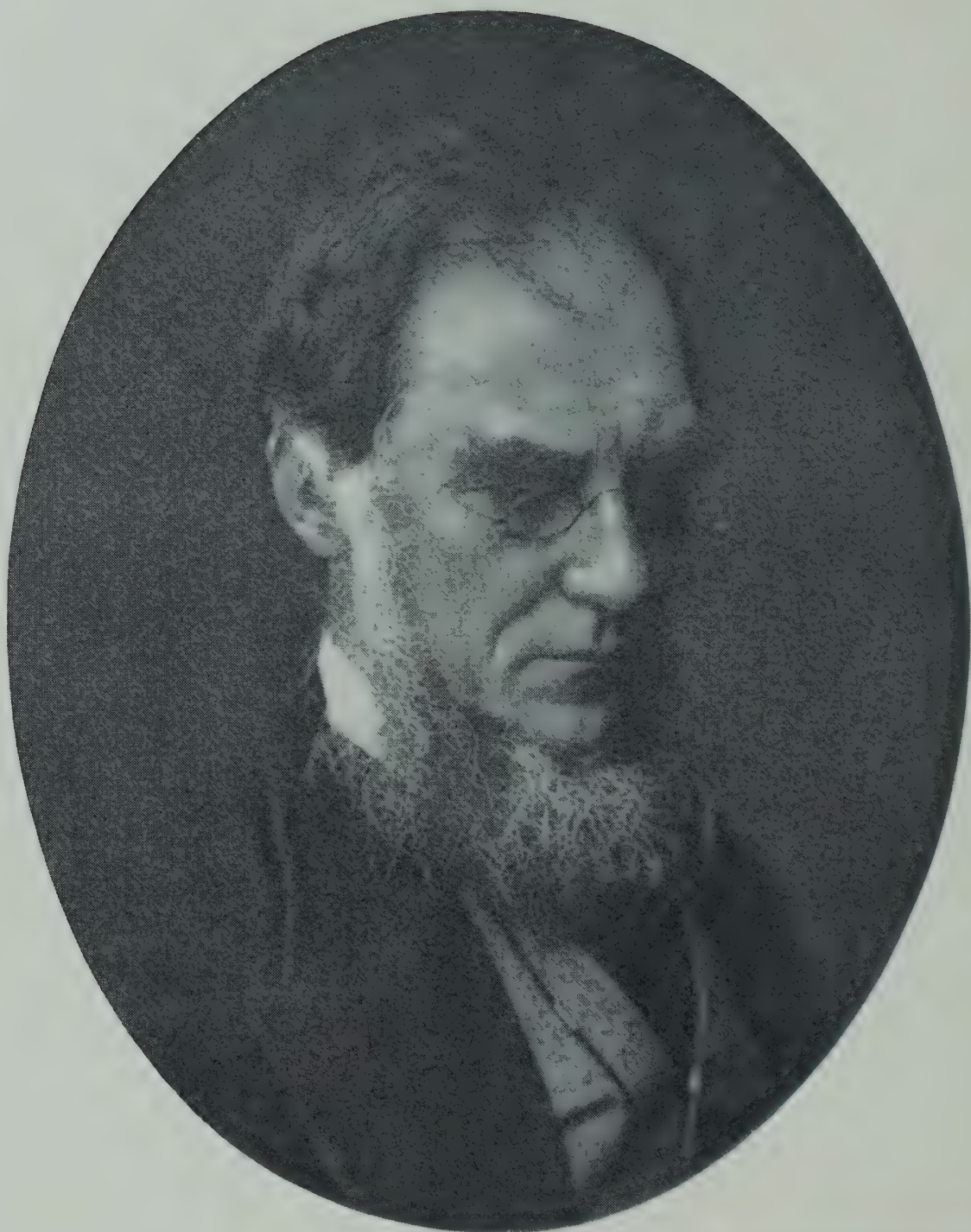
The general lines of Warley Garden are much as they were in John Evelyn's time. The Alpine Garden is about the only addition. The real glory of the place is, however, the *Crocus vernus* growing wild over acres of greensward as it has ever since Evelyn's reign at Warley. The collection of rose species and first crosses had been begun by Mrs. Willmott and has been constantly added to as occasion presented, and from these Alfred Parsons, R.A., made the drawings to illustrate the monograph of the *Genus Rosa*. This book was the result of many years of study and research. The first part was published by John Murray in 1910.

When the Council of the Linnean Society in 1904 decided to admit women, Miss Willmott's name was the first to be proposed. Mr. Henry Elwes had for years urged the

ELLEN ANN WILLMOTT

Linnean Society to consider the question of women Fellows, and mainly by his untiring efforts the Linnean Society was the first of the learned societies to admit women, and Miss Willmott became a Life Fellow. She is also a Life Fellow of the Royal Institution and of the Royal Horticultural Society, and was appointed one of the three trustees of Wisley Garden by Sir Thomas Hanbury when this munificent gift was made by him to the Royal Horticultural Society. She serves upon the Floral Committee of the Royal Horticultural Society, and Miss Jekyll and herself were the two women amongst the original recipients of the V.M.H. (Victoria Medal of Honour) when it was instituted in 1897.

The Grande Medaille Geoffroy St. Hilaire was conferred upon her in 1912 by the Société d'Acclimatation de France.



Royal Botanic Gardens, Kew.

SIR JOSEPH DALTON HOOKER, O.M., G.C.S.I., C.B.

TO WHOM VOLUME CXXXIV.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1908.

SIR JOSEPH DALTON HOOKER

(1817-1911)

JOSEPH DALTON HOOKER was born at Halesworth, Suffolk, on the 30th of June, 1817, the second son of William Jackson Hooker and Maria Sarah, eldest daughter of Dawson Turner, F.R.S., of Norwich. Hooker's father was a distinguished botanist, and he himself acquired a passion for botanical exploration and research. He was educated at Glasgow High School and University, taking his M.D. in 1839.

In that same year he was gazetted as Assistant Surgeon and Botanist to the *Erebus*, about to start, with the *Terror*, on the famous Antarctic Expedition led by Sir James Clark Ross. New Zealand, Australia, Tasmania, Kerguelen, Tierra del Fuego, and the Falkland Islands were visited, and large collections of plants and a vast amount of botanical information resulted. This was published in six quarto volumes, two under each of the three titles, *Flora Antarctica*, 1844-47, *Flora Novae Zelandiae*, 1852-55, and *Flora Tasmaniae*, 1855-60.

Hooker began a second great journey in 1847. He was able to choose between two mountainous regions in the tropics, the Andes and the Himalayas, and he chose the latter. Some time was spent in exploring Sikkim, and the account of the adventures there is to be found in his fascinating *Himalayan Journals*. This, with other journeys to the westward with Dr. Thomas Thomson, occupied a year or more, and then the two men returned to England together in 1851. They collaborated in the *Flora Indica*, but only one volume appeared, in 1855, as Thomson returned to India and Hooker took on new duties by his appointment to the post of Assistant Director at Kew under his father. He was able, however, to visit Syria and Palestine in 1860, whence he gathered information for a paper on the Lebanon cedar grove. Much of the botanical data gained on that trip is contained in Smith's *Dictionary of the Bible*.

The most important part of Hooker's systematic work, while Assistant Director at Kew, was the commencement, with George Bentham, of the preparation of the *Genera Plantarum*, the first part of which was issued in 1862. He

SIR JOSEPH DALTON HOOKER (1817-1911)

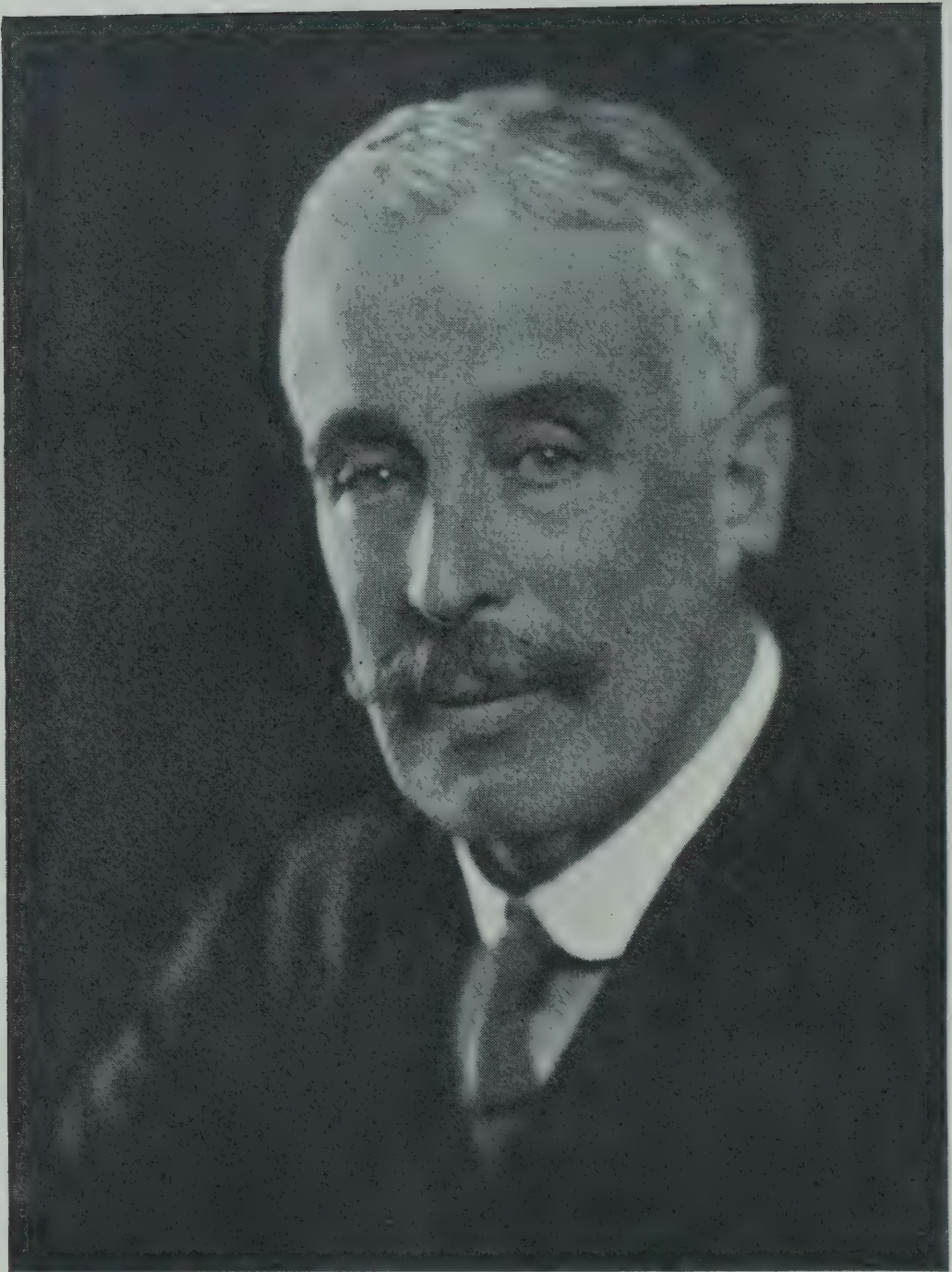
also contributed to the Kew colonial floras a *Handbook of the New Zealand Flora*, 1864-67.

In 1865 he succeeded his father as Director of Kew, a position he held for twenty years. Administrative duties took up much of his time but did not prevent him from continuing his scientific work. Besides his share in the production of the *Genera Plantarum* he became editor of the *Icones Plantarum* and the *Botanical Magazine*. He edited the latter journal from the 91st to the 130th volume. His *Student's Flora of the British Islands* appeared in 1870. About this time he was also able to begin the final preparation of the *Flora of British India*. The first part of the opening volume of this great work was issued in 1872 and the seventh, and last, volume appeared in 1897. Only a very small percentage of Hooker's published work can be noted here. The complete list, given in the *Kew Bulletin*, 1912, covers more than sixteen pages.

With John Ball and George Maw, Hooker undertook a botanical expedition to Morocco and the Atlas Range in 1871, and in 1877 he accompanied his friend Asa Gray on a journey to Colorado, Utah, the Rockies, the Sierra Nevada, and California.

Much of interest could be given concerning Hooker's association with Darwin in his great work on the origin of species. The intercourse of the two men from the middle of the eighteen-forties to the publication of Darwin's work forms a memorable page in scientific history.

Many honours were showered upon Hooker during the seventy active years of his life. His academic distinctions include the honorary degree of D.C.L. of Oxford and that of LL.D. of Cambridge, Edinburgh, Dublin, and Glasgow. In 1877 he was made K.C.S.I., in 1897 G.C.S.I., and in 1907, on his ninetieth birthday, he received the Order of Merit. For five years he was President of the Royal Society. This Society awarded him the Royal Medal in 1854 and the Copley Medal in 1887. The Linnean Medal went to him in 1888; and he was one of the original recipients of the Victoria Medal of Honour in 1897. Van Tieghem gave the name *Hookerella* to a genus of plants in 1895. Sir Joseph passed away in his sleep at the Camp, Sunningdale, Berkshire, at midnight on the 10th of December, 1911. His remains were interred in the family grave at Kew in accordance with his wishes and in spite of an offer of burial in Westminster Abbey.



Courtesy of Sir Frederick Moore.

F. W. MOORE, ESQ., M.A., A.L.S., V.M.H.

KEEPER OF THE ROYAL BOTANIC GARDEN, GLASNEVIN

TO WHOM VOLUME CXXXV.

IS DEDICATED .

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1909.

FREDERICK WILLIAM MOORE

(1857-)

FREDERICK WILLIAM MOORE, son of Dr. David Moore, was born in Dublin on the 3rd of September, 1857. He received his early education in Dublin, and from 1869 to 1872 he attended a school in Germany, and later the Royal College of Science, Ireland.

He spent the years 1875 and 1876 at Van Houtte's Nurseries, Ghent, when that firm was at the zenith of its fame, and attended classes at the State School of Horticulture. From Ghent he entered the Botanic Gardens at Leiden and spent some time in the Botanical Laboratory of Leiden University under Suringar and Treub.

In 1877 he returned to Dublin and was appointed Curator of Trinity College Botanic Gardens, where he remained until September, 1879. His father, who had been Curator of the famous Botanic Gardens at Glasnevin for forty years, died in June, 1879, and his son was appointed in his stead in September.

With great energy and enthusiasm Moore devoted himself to the development of the Glasnevin Gardens to accord with the modern conception of a botanic garden. He early began the formation of the fine collection of *Orchidaceae*, in which family he has never lost interest. One of the beautiful members of this family was given the generic name *Neo-moorea* in his honour in 1904. He also built up very fine collections of palms, cycads, and other tropical plants, temperate woody plants, representing many families, and tender Monocotyledons. Mindful of the claims of horticulture, he arranged for a continuous display of well-grown garden plants, to which the popularity of Glasnevin has been largely due.

Many additions and improvements were made at Glas-

FREDERICK WILLIAM MOORE (1857-)

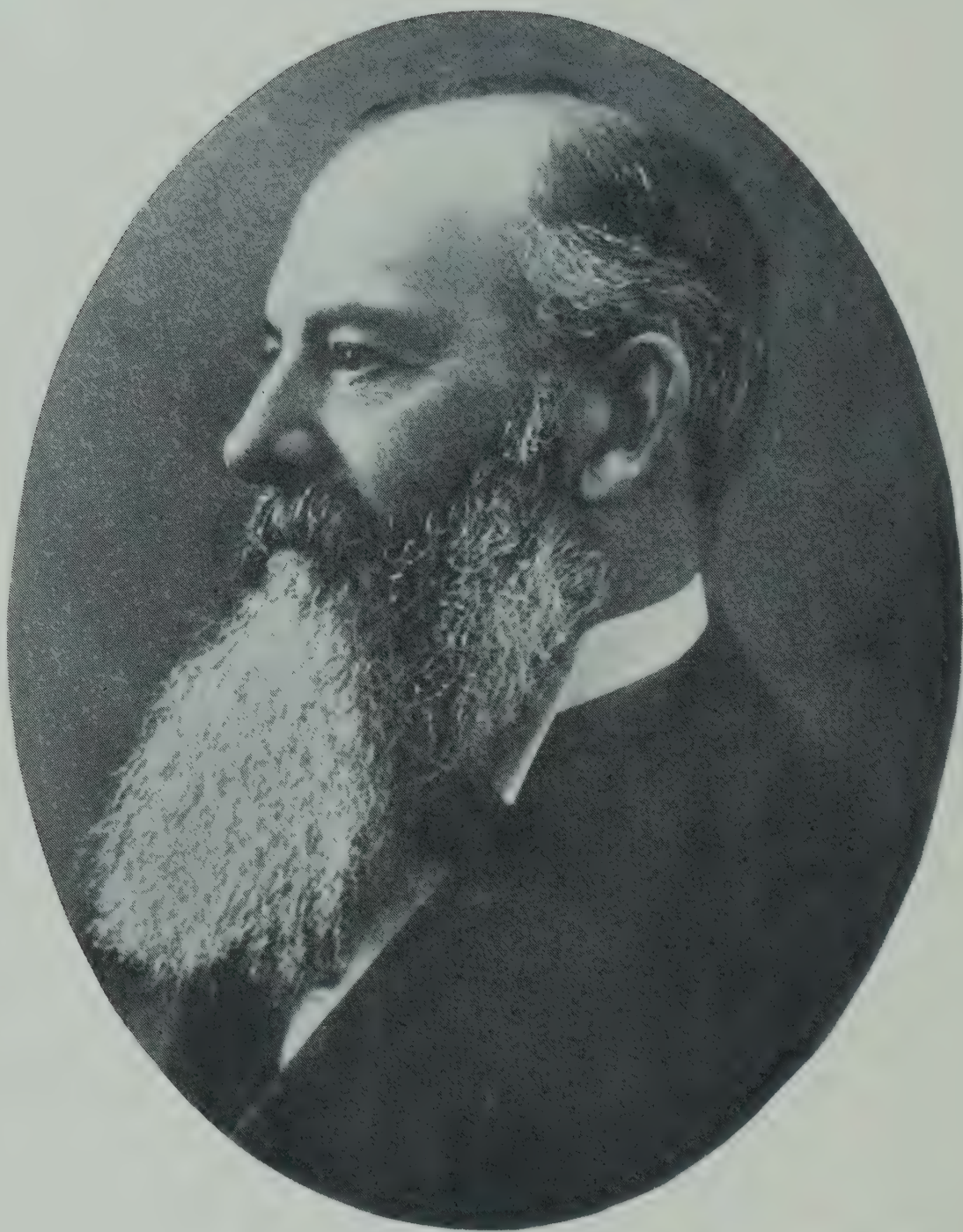
nevin on Moore's recommendations. The West Arboretum, acquired in 1878, was planted entirely by him; a new Palm House was erected in 1884 at a cost of £5,000; the Aquatic House was built in 1884-85; a new house for tree ferns in 1886-87; a new Office and Library in 1890, and a Cactus House in 1897. A nursery field of from seven to eight acres was acquired in 1898, and in this a new range of propagating houses was erected in 1914.

Early in the present century the gardens came under the Department of Agriculture and Technical Instruction, and Moore was called upon to lay the foundation of fruit growing as an industry. For years he spent a considerable time inspecting land, giving advice as to planting and selection of varieties, and to the training of men as county instructors.

He travelled extensively on the Continent, and in 1911 visited the United States and Canada on behalf of his Department, chiefly to study methods of fruit growing. In 1922 he retired, having served for forty-three years without a day's absence from illness.

For his work he received well-merited recognition. He was one of the sixty original recipients of the Victoria Medal of Honour in 1897, and was also awarded the Veitch Memorial Medal. He received the honorary degree of M.A. from the Royal University of Ireland in 1909 in recognition of his services to the Botanical Faculty, and in 1911 he received a knighthood for his services to horticulture in Ireland.

Sir Frederick, who was elected an Associate of the Linnean Society in 1893, has been a Fellow since 1911, is a Vice-President of the Royal Irish Academy, Honorary Secretary of the Royal Horticultural and Arboricultural Society of Ireland, and a member of the Council of the Royal Dublin Society. He acted as Consulting Botanist to this Society during his curatorship. He has been President of the Royal Zoological Society of Ireland.



Hortus Veitchii.

HARRY J. VEITCH, ESQ., F.L.S., V.M.H.

TO WHOM VOLUME CXXXVI.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1910.

HARRY JAMES VEITCH

(1840-1924)

HARRY JAMES VEITCH was born at Exeter on the 29th of June, 1840. He was educated in his home city and at Altona, near Hamburg, afterwards joining the staff of the famous French nursery firm, Vilmorin-Andrieux et Cie.

At the age of eighteen he went to Chelsea to help his father in the management of the nurseries acquired five years previously from Messrs. Knight and Perry. From that time, except for a short interval, until the firm of James Veitch and Sons came to an end in 1914, he was actively engaged in the business, and helped to raise it to the highest position among the nurseries of this country. By sending plant collectors to various parts of the world and by the raising of beautiful hybrids the Veitches rendered a great service to botany and horticulture. They had the distinction of raising the first hybrid orchid, *Calanthe Dominii*, and produced, in addition to many other fine orchids, beautiful hybrids in *Begonia*, *Streptocarpus*, *Hippeastrum*, *Nepenthes*, and other genera. With new fruits and vegetables they were equally successful. Among the many plants which the firm of Veitch introduced to cultivation in this country from abroad were the well-known *Ampelopsis Veitchii* and the beautiful *Lilium auratum*. They were both brought from Japan in 1862. Other of their notable introductions were *Berberis Darwinii* from Chiloe, 1849, *Lilium giganteum* from the Himalaya, 1851, and *Sequoia gigantea* from California in 1853. One of their last collectors was E. H. Wilson, the pioneer of eastern Asiatic plant collectors, to whom we owe many fine garden plants. The journeys of earlier 'travellers' for the firm took them to China, Japan, Chile, Brazil, Madagascar, and the East Indies.

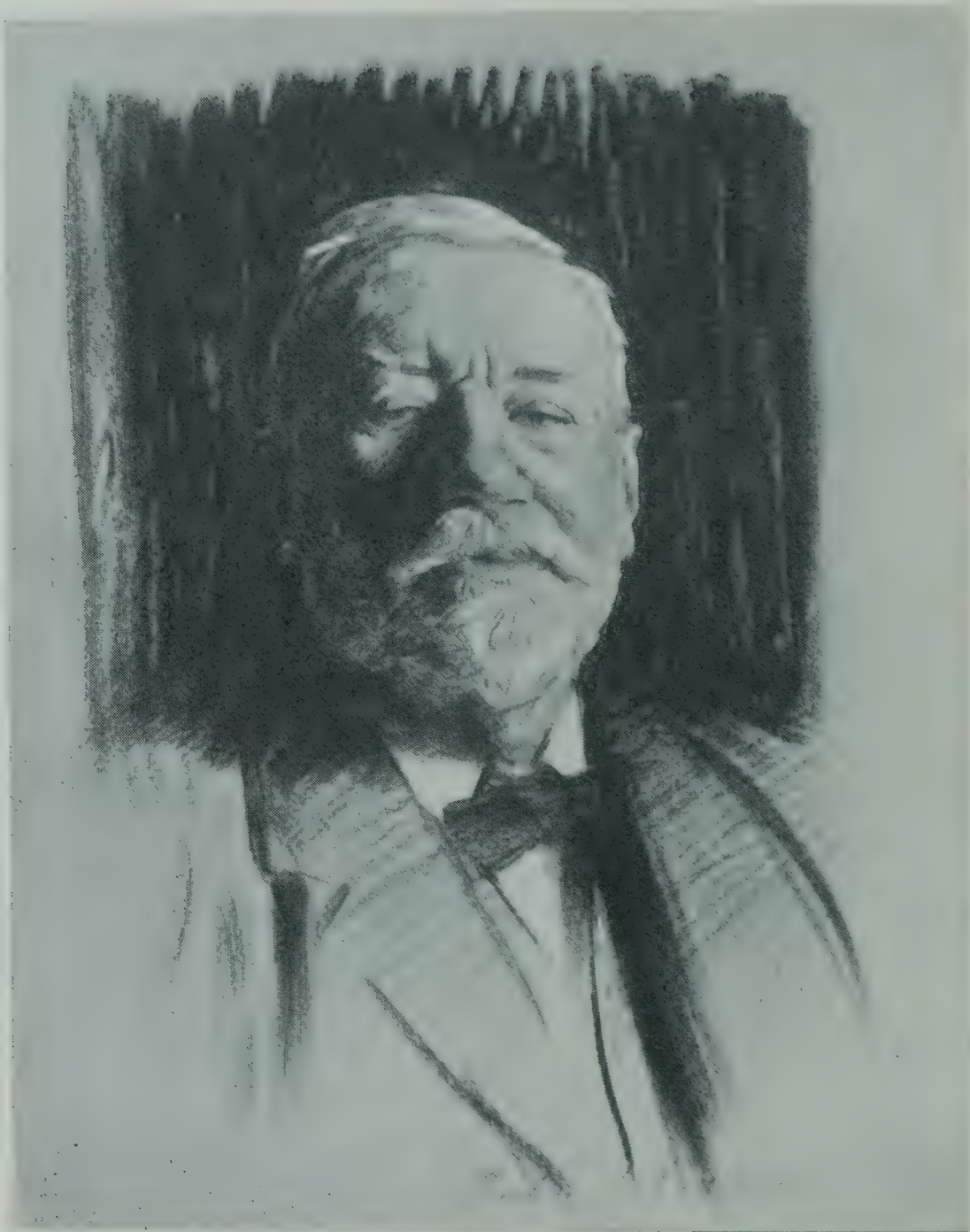
Various publications were issued by Messrs. Veitch

HARRY JAMES VEITCH (1840-1924)

while Sir Harry was head of the firm. *A Manual of the Coniferae* appeared in 1881, and went to a second edition in 1900, and the ten parts of the two-volume *Manual of Orchidaceous Plants Cultivated under Glass in Great Britain* were issued between 1887 and 1894. Of Sir Harry's own publications a large proportion appeared in the *Journal of the Royal Horticultural Society*, and included *Orchids Past and Present*, 1889, *Coniferae of Japan*, 1892, and *Deciduous Trees and Shrubs of Japan*, 1894. The history of the House of Veitch, entitled *Hortus Veitchii*, in the production of which Harry Veitch shared, appeared in 1906.

He was on the Committee of the International Exhibition held in 1866 in London. The profits from the Exhibition went to purchase the Lindley Library, which was vested in the Royal Horticultural Society. With this body Harry Veitch was long and intimately associated and, with others, helped to lay the foundation of its present-day prosperity. He also took part in the International Horticultural Exhibition of 1912, and for his work was rewarded with a knighthood. In addition to many foreign honours for his services to horticulture, he received from the Royal Horticultural Society, in 1906, the Victoria Medal of Honour. He took over the Treasurership of this Society as late as 1918.

In 1914 Sir Harry retired from business, and, there being no heir, the firm was wound up. He died at Slough, Buckinghamshire, on the 6th of July, 1924.



Royal Botanic Gardens, Kew.

CHARLES SPRAGUE SARGENT, LL.D., F.M.L.S

DIRECTOR OF THE ARNOLD ARBORETUM

TO WHOM VOLUME CXXXVII.

IS DEDICATED

KEW, DECEMBER 1, 1911.

CHARLES SPRAGUE SARGENT

(1841-1927)

CHARLES SPRAGUE SARGENT was born at Boston, Massachusetts, on the 24th of April, 1841. He graduated at Harvard University in 1862, and soon afterwards joined the Federal Army and served through the American Civil War.

On being 'honorably mustered out' in 1865, Sargent turned his attention to botany, and particularly to the study of North American trees. The Arnold Arboretum, of which he was largely the creator, was established in 1872, and he became its first Director. He found himself, as he stated later, 'With a worn-out farm . . . to be developed into a scientific garden with less than three thousand dollars a year available for that purpose; without equipment . . . or public support.' During fifty-four years, involving time, energy, and wealth, Sargent built up a unique collection of trees and shrubs, and the Arboretum was developed into one of the most important scientific plant institutions in the world. He also founded its library with six thousand of his own books. In 1903 Sargent made a tour round the world, bringing back a large collection of specimens for the Arboretum, including seeds of many trees and shrubs new to American arboriculture. The last of his many visits to England took place in the summer of 1914.

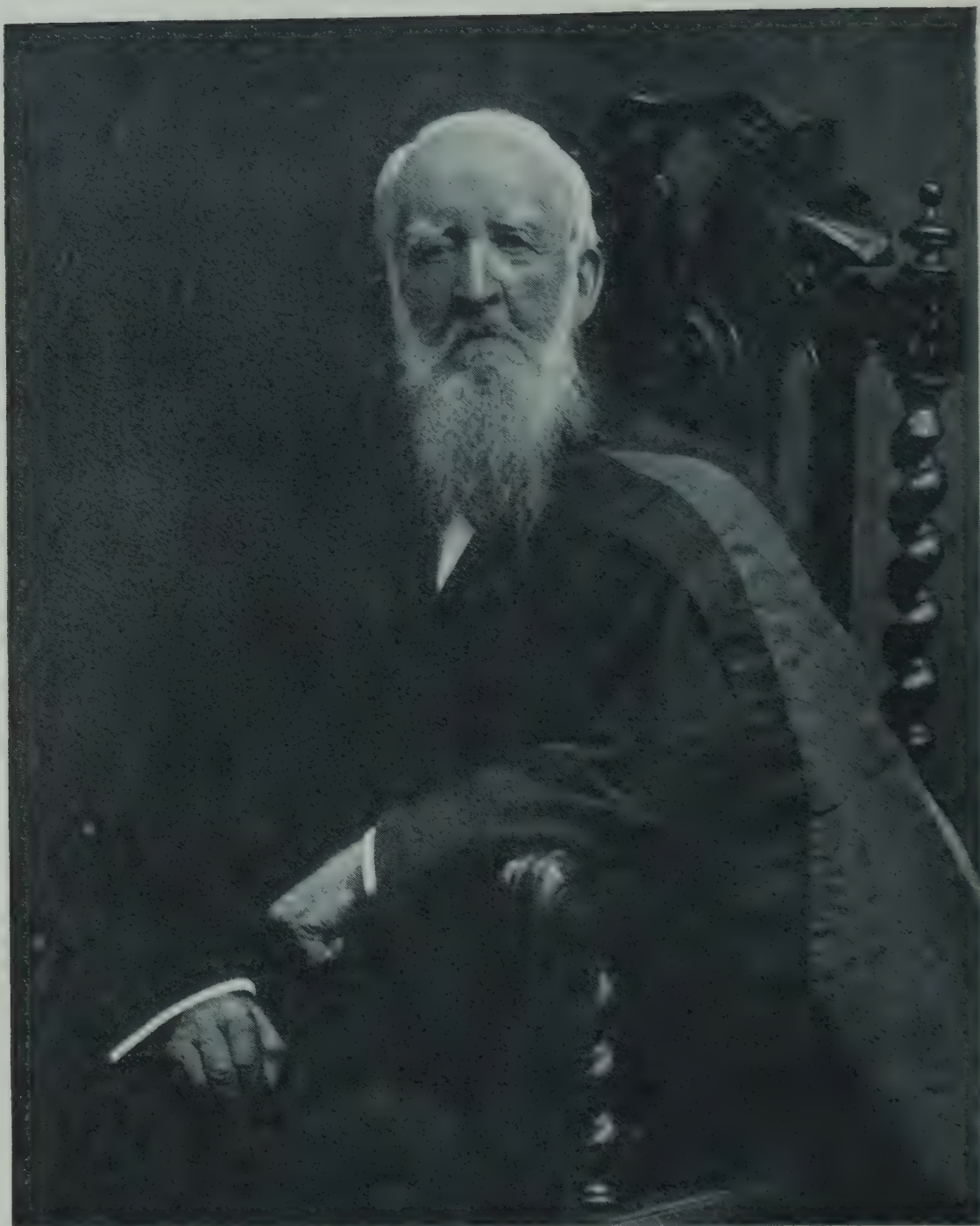
The *Silva of North America* stands at the head of his numerous contributions to botanical literature. This is a work of fourteen quarto volumes, illustrated by 740 plates, which appeared in the period 1891 to 1902. As a result of a visit to Japan in 1892, Sargent published a *Forest Flora* of that country. His *Manual of the Trees of North America*, which appeared in 1905, is a one-volume abridgment of the *Silva*. In 1888 he founded the journal, *Garden and Forest*, and edited it until it was discontinued in 1897. Between

CHARLES SPRAGUE SARGENT (1841-1927)

1902 and 1913 two hundred new and noteworthy species were figured in his two-volume work entitled *Trees and Shrubs*. Very many more publications came from Sargent's pen. He was the editor of two important productions, the *Plantae Wilsonianae*, describing E. H. Wilson's collections from China, and the *Bradley Bibliography*, a classification of the books and papers, relating to woody plants, published up to 1900.

Many honours were bestowed on Sargent. He was a member of more than a score of academies and societies, including the National Academy of Sciences, Washington, the Société Botanique de France, the Irish Academy of Dublin, the Botanical Society of Tokyo, the Scottish Arboricultural Society, and the English Rhododendron Society. He was elected a foreign member of the Linnean Society in 1902. In 1924 the Royal Horticultural Society awarded him the Loder Rhododendron Cup. This was the first time it had been sent out of Europe. He is commemorated in the genera *Sargentia* and *Sargentodoxa*.

Sargent was a man of magnificent physique, and was also endowed with a strong personality. His name will live as long as the Arnold Arboretum lasts, to the development of which he devoted such a long life. He passed away at Boston on the 22nd of March, 1927, after a short illness.



Royal Botanic Gardens, Kew.

JOHN MEDLEY WOOD, A.L.S.

DURBAN BOTANIC GARDEN

TO WHOM VOLUME CXXXVIII.

IS DEDICATED

KEW, DECEMBER 1, 1912.

JOHN MEDLEY WOOD

(1827-1915)

JOHN MEDLEY WOOD was born at Mansfield, Nottinghamshire, on the 1st of December, 1827, the son of a naval officer. He himself joined the East India merchant service and attained to the rank of chief officer. In 1852 he left the sea and went to live at Natal, where his father, then a landsman, was practising as a solicitor.

After his father died young Wood took to farming and through his interest in botany became acquainted with Mr. McKen, formerly Curator of Durban Botanic Garden, who later married his sister. In the cultivation of cotton, sugar, castor-oil, and coffee, Wood's knowledge of botany was of great use to him. In September, 1875, he began to correspond with Kew and regularly to send, up to his death, herbarium specimens as well as valuable living plants for the Gardens.

He was appointed Curator of the Botanic Garden at Durban in 1882. It was long held that he was instrumental in establishing the Uba Cane in Natal; but Sir Arthur Hill, in the *International Sugar Journal*, August, 1931, said that 'in view of recent information it appears to be fairly certain that the canes dealt with by Mr. Wood are not the canes that gave rise to the name Uba.' From the time of his appointment as Curator until his death Wood lived in the Garden, the only change in his life being promotion to the Directorship of the establishment. When, subsequently, the Garden was taken over by the Union Government he remained Director of the Natal Herbarium. This was in a poor state when he took charge, but after drastic reorganisation and rearrangement the collection was considerably enlarged.

Wood's *Natal Plants*, 1898-1912, a work in six volumes

JOHN MEDLEY WOOD (1827-1915)

illustrating six hundred specimens from that province, was the finest of his botanical publications. A few weeks before he died he announced that seventy-two plates for a seventh volume were ready, but these were never published. Other of his publications were, *Guide to the Trees and Shrubs in the Natal Botanic Gardens, Durban*, 1897, *Handbook to the Flora of Natal*, 1907, and *Revised List of the Flora of Natal*, 1908.

The Linnean Society elected Wood an Associate in 1887. The degree of Doctor of Science was conferred on him by the Cape University in 1913. His rather sudden end came at Durban, at the ripe age of eighty-seven years, on the 26th of August, 1915. The name *Woodia* was given in his honour to a genus of *Asclepiadaceae* in 1894.



Garden.

SIR FRANK CRISP, BARONET

OF FRIAR PARK, HENLEY-ON-THAMES

TO WHOM VOLUME CXXXIX.

IS DEDICATED

KEW, DECEMBER 1, 1913.

SIR FRANK CRISP

(1843-1919)

FRANK CRISP, an only child, was born in London on the 25th of October, 1843. He was educated first at private schools and subsequently at the London University College at Gower Street, where he graduated B.A. and later got his LL.B.

His early ambition was to become an engineer, but just before leaving school he turned his affection to the law and gave his spare time enthusiastically to attendance at the Law Courts. At the age of sixteen he was articled to Messrs. Ashurst & Morris of Old Jewry. He was admitted a solicitor in 1869 and was so successful that he entered into partnership under the title of Ashurst, Morris, Crisp & Co. A great authority on company law, he was a member of the Board of Trade Commission appointed in connection with the Amendment of Companies Act. Business grew and Crisp worked hard, but he wisely decided that a hobby was the best form of mental rest and relaxation.

He became interested in the microscope and soon accumulated splendid instruments and apparatus, besides building up a huge library on the subject. The Royal Microscopical Society elected him a Fellow in 1870. He served on its Council from 1874, and was one of its secretaries from 1878 to 1889. The editorship of the Society's *Journal* he also took over, and into this he infused new life, filling it with numerous papers, besides the reports of the activities of the Society.

At Henley-on-Thames he built a fine country seat, Friar Park, directing the laying out of the grounds, including a splendid rock garden, himself. Beneath the gardens were excavated passages, electrically lighted. He published an entertaining *Guide* to the gardens. The proceeds from

SIR FRANK CRISP (1843-1919)

the sale of this, as well as from the admission of visitors on Wednesdays during the summer months, were devoted to charitable purposes.

Crisp was elected a Fellow of the Linnean Society in 1870, served on the Council for long periods from 1879 until his death, and was Treasurer for twenty-four years. To this Society, as also to the Microscopical Society, he was very generous, his gifts to the Linnean including a £200 fund for microscopical research, the sculptor's model of the statue of Linnæus at Stockholm, and the phototyped copy of the Vienna *Codex Aniciae Julianae* of Dioscorides. The Royal Horticultural Society awarded him the Victoria Medal of Honour in 1918. He was created a baronet six years before his death, which took place at Henley-on-Thames on the 29th of April, 1919.

A fine posthumous work in two volumes, *Mediaeval Gardens*, etc., edited by his daughter, Catherine Childs Paterson, was published in 1924.



Royal Botanic Gardens, Kew.

PROFESSOR HENRY HAROLD WELCH PEARSON
M.A., Sc.D., F.L.S.

DIRECTOR OF THE NATIONAL BOTANIC GARDEN OF SOUTH AFRICA

TO WHOM VOLUME CXL.

IS DEDICATED

KEW, DECEMBER 1, 1914.

PROF. HENRY HAROLD WELCH PEARSON

(1870-1916)

HENRY HAROLD WELCH PEARSON, born at Long Sutton, Lincolnshire, on the 28th of January, 1870, was educated privately and matriculated in the University of London in 1889. In October 1893 he entered Cambridge as a non-collegiate student. His University career was a very brilliant one, his feats including a First Class in both parts of the Natural Sciences Tripos.

He spent six months in Ceylon studying its tropical vegetation as a Worts Travelling Scholar of his University. He became Assistant Curator of Cambridge Herbarium, under Professor Marshall Ward, in 1898. On March 1, 1899, he was appointed Assistant for India at Kew. The Linnean Society elected him a Fellow in 1901.

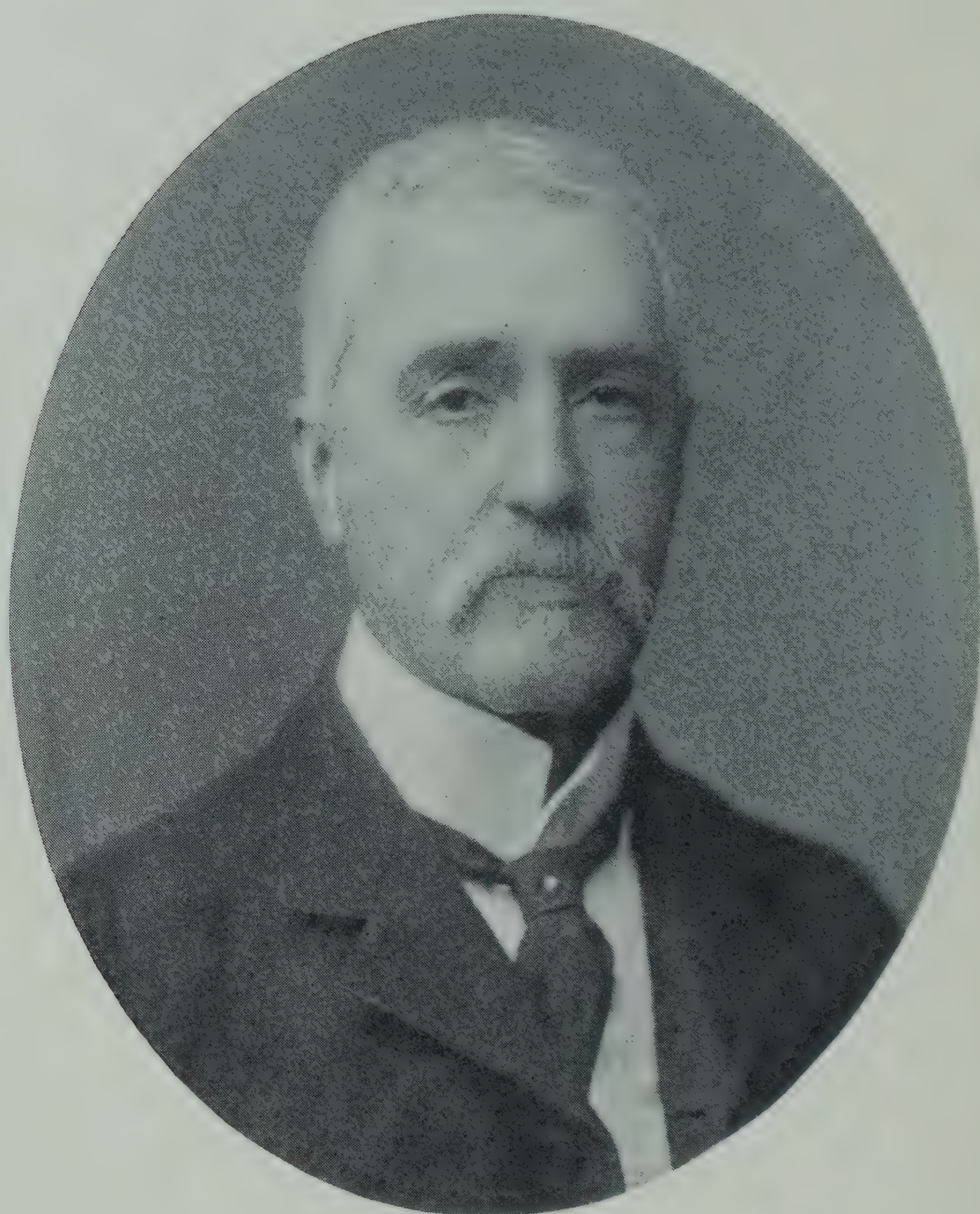
The Council of the South African College in 1903 appointed Pearson to the Harry Bolus Professorship of Botany in that College at Cape Town. His work in South Africa lay chiefly in botanical exploration, in which he excelled. Expeditions were made to such areas as Namaqualand, South-West Africa, and Angola. One of the chief objects of these journeys was to continue the investigation of that remarkable genus of *Gnetaceae*, *Welwitschia*, which had been begun by Sir Joseph Hooker. His first visit to the *Welwitschia* country was in January, 1904, and in May of that year he wrote to a friend in this country from Cape Town: ' . . . I spent two glorious days in the heart of the Damaraland desert in the company of the most magnificent array of flowering *Welwitschias* that ever man saw.' But the Hereros and Germans came to blows and Pearson had to quit. The expedition to Angola, assisted by the Percy Sladen Trustees, was primarily for the purpose of collecting material of *Gnetum africanum*. Pearson was also interested

PROF. HENRY H. W. PEARSON (1870-1916)

in the cycads, especially with regard to their pollination, and made important additions to our knowledge of the South African species.

In 1914 the *Annals of the Bolus Herbarium* began under the editorship of Pearson, and he also edited for a time the *Journal of the Botanical Society of South Africa*. He was author of many papers of a morphological and of a systematic nature. His most important contributions to morphological botany are on the Gnetales. He had almost completed an important work on these plants at the time of his death, and this, edited by Prof. A. C. Seward, was published in 1929.

He took the Cambridge Sc.D. in 1907, and in 1916 was elected a Fellow of the Royal Society. He died at Cape Town on the 3rd of November, 1916, at the early age of forty-six, from pneumonia following an apparent recovery from an operation, and he was buried among his cycads, on the Cycad Hill, in the National Botanic Garden at Kirstenbosch, of which he was the founder. He is commemorated in the African genus of *Leguminosae*, *Pearsonia*.



Courtesy of Vice-Admiral H. Heard.

S. T. HEARD, ESQUIRE
OF ROSSDOHAN, NEAR KENMARE

TO WHOM VOLUME CXLI.
IS DEDICATED

KEW, DECEMBER 1, 1915.

SAMUEL THOMAS HEARD

(1835-1921)

SAMUEL THOMAS HEARD, second son of Edward Heard of Ballintubber, County Cork, was born at Ballintubber on the 2nd of July, 1835. As a boy he showed an impartial liking for classical study and outdoor pursuits, particularly gardening and riding. Later on, when he was allowed to ride to hounds, the hunting field proved more attractive than the garden. He graduated in medicine at Edinburgh University, whence he proceeded to Paris to get experience in hospital work before joining the service of the Honble. East India Company.

He was appointed to the Madras Medical Department and found on reaching India that the great Mutiny of 1857 had broken out. His reputation as a fearless rider seems to have gone before him, as he was at once given medical charge of the Madras Horse Artillery. For his services he was awarded the Mutiny Medal.

In the quiet period which followed, Heard gained in India a reputation as an ardent pig-sticker, similar to that he had acquired in Ireland as a keen rider to hounds.

In 1862 he married Kate, daughter of the Hon. William Bradley, J.P. and Member of the Legislative Council of Lindsay and Lansdowne, New South Wales.

In the early eighteen-seventies, soon after he became a Surgeon-Major, he retired from the Indian Army and purchased an estate in County Kerry, which promised scope for his two favourite outdoor pursuits. On an island in the Kenmare River he built Rossdohan House, and this was his home from its completion in 1873 until his death. He became a Justice of the Peace and later a Deputy Lieutenant in Kerry, and in 1908 was High Sheriff of the County. During

SAMUEL THOMAS HEARD (1835-1921)

the first half of these forty-eight years he rode regularly to hounds in Ireland and occasionally in England.

Apart from his public duties and his sport, Heard's chief occupation was the conversion of his wind-swept island home, with its solitary hawthorn bush, into a charming and interesting garden. As wind-breaks against the south-westerly gales from the Atlantic he skilfully employed Irish gorse and Chilean *Escallonia*, and in this sheltered area he grew successfully the rarities of the temperate and warm-temperate plant world. The Rossdohan collection of species of *Arundinaria* was one of the most complete in the British Isles, and the representation there of Australasian plants was unusually extensive.

At Rossdohan, on the 5th of June, 1921, this sound scholar, great sportsman and skilled gardener, passed away.

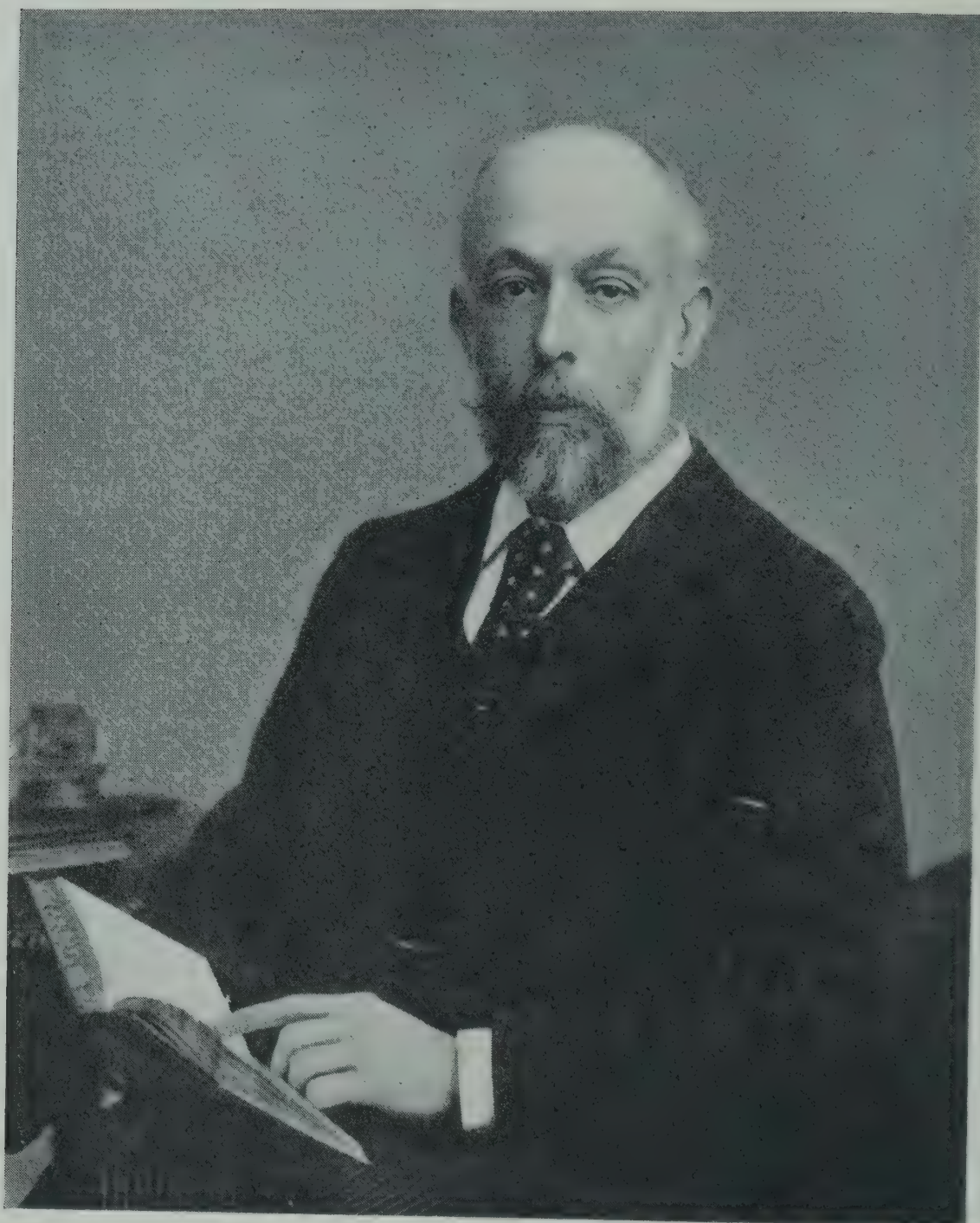


Photo. by Elliott & Fry.

SIR WILLIAM TURNER THISELTON-DYER
K.C.M.G., C.I.E., F.R.S.

TO WHOM VOLUME CXLII.

IS DEDICATED

KEW, DECEMBER 1, 1916.

SIR WILLIAM TURNER THISELTON-DYER

(1843-1928)

WILLIAM TURNER THISELTON-DYER was born in Westminster on the 28th of July, 1843. He entered King's College, London, to study medicine, but changed his plans and at the age of twenty went up to Christ Church, Oxford, as a Junior Student. In 1867 he was placed in the first class of the final school of Natural History, and obtained a second class in Mathematics.

He was appointed Professor of Natural History at the Royal Agricultural College, Cirencester, in 1868. Here he collaborated with A. H. Church, the Professor of Chemistry, in an adaptation of S. W. Johnson's book, *How Crops Grow*. As a sequel to his botanizing with Henry Trimen in London College days, their *Flora of Middlesex* was published in 1869.

Taking his London B.Sc., Thiselton-Dyer went to Dublin as Professor of Botany at the Royal College of Science in 1870, but after two years returned to London to act in the same capacity for the Royal Horticultural Society.

About this time he became associated with Huxley in the revolutionary method of teaching biology which the latter had organised at South Kensington, and he conducted courses in botany for science teachers along these new lines from 1873 to 1876 and again in 1880. Thiselton-Dyer gives an account of the work in the preface to Bower and Vines's *Course of Practical Instruction in Botany*, 1885. With A. W. Bennett he translated the first edition of Sach's *Text Book of Botany* in 1875.

In the same year Thiselton-Dyer was appointed Assistant Director at Kew under Dr. (afterwards Sir) J. D. Hooker, and for thirty years devoted himself to the administrative work of the Gardens. Hooker, recognising the younger man's ability, selected him to deal with the rapidly-growing volume of work at Kew connected with the Colonies. For his share in the development of botanical enterprise through-

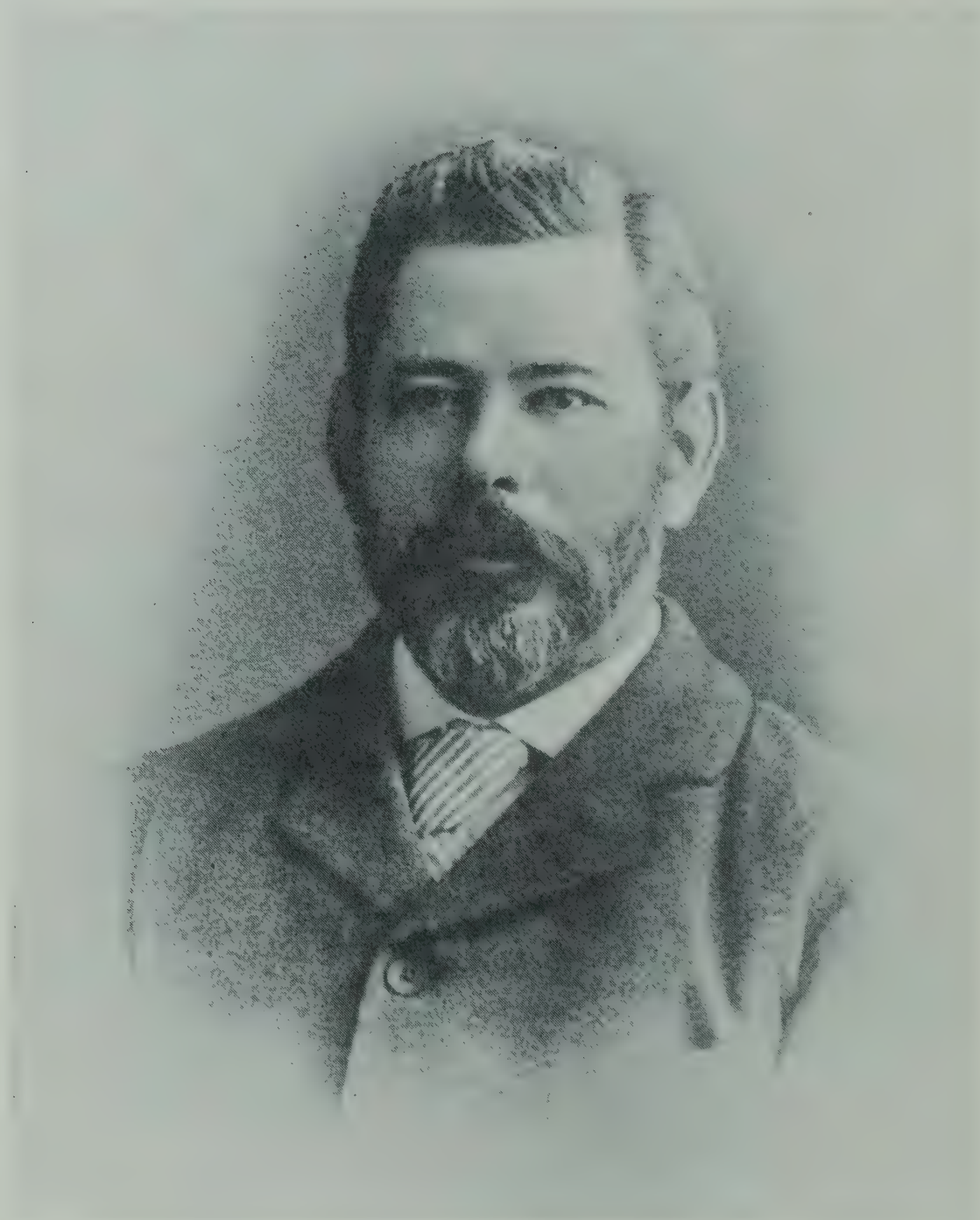
SIR WILLIAM T. THISELTON-DYER (1843-1928)

out the Empire he was created C.M.G. in 1882, and K.C.M.G. in 1899. He was made C.I.E. in 1892. He succeeded Hooker as Director of Kew in 1885. Besides Thiselton-Dyer's great achievement in making Kew the botanical centre of the Empire, much was done to improve the Gardens at Kew during his régime. The Jodrell Laboratory was built at his suggestion; the Temperate House, long left unfinished, was completed in 1899; and the erection of the popular Alpine House and rebuilding of the Succulent House were other important undertakings.

Thiselton-Dyer resumed the preparation, in 1896 and 1897 respectively, of the two great floras, the *Flora Capensis* and the *Flora of Tropical Africa*, on both of which work had been delayed for some years. He also initiated, in 1887, the *Kew Bulletin of Miscellaneous Information*, primarily to record the work done at Kew in connection with the economic botany of the overseas Empire. During his directorship the *Index Kewensis* was proceeded with; he edited *Hooker's Icones Plantarum* from 1896 to 1906, and the *Botanical Magazine* during 1905 and 1906.

He became a Fellow of the Linnean Society in 1872, served on the Council for several years, and was Vice-President from 1885 to 1887. In 1880 he was elected a Fellow of the Royal Society, served also on its Council 1886-87, and was Vice-President, 1896-97. Of the Royal Horticultural Society, too, he was Vice-President from 1887-89, infusing it with new life in the first year of this period when it had become almost moribund. He was first President of the new Botany Section of the British Association at Ipswich in 1895.

Sir William remained active after his retirement from Kew in December 1905, and on his 80th birthday in 1923 received a congratulatory address from all the leading botanists in Great Britain and Ireland. He died at Witcombe, Gloucestershire, on the 23rd of December, 1928. Sir Joseph Hooker gave the name *Dyera* in his honour to a genus of *Apocynaceae* and he was commemorated also in the genera *Dyerella* and *Dyerophytum*.



Journal of the Kew Guild.

RICHARD IRWIN LYNCH, M.A., A.L.S., V.M.H.

CURATOR, BOTANIC GARDEN, CAMBRIDGE

TO WHOM VOLUME CXLIII.

IS DEDICATED

KEW, DECEMBER 1917.

RICHARD IRWIN LYNCH

(1850-1924)

RICHARD IRWIN LYNCH was born on the 1st of June, 1850, at St. Germans, Cornwall, where his father was Head Gardener to the Earl of St. Germans. He went to Kew Gardens at the age of seventeen after an apprenticeship under his father, who was himself Kew trained. Promoted to the post of Foreman of the Herbaceous Department in 1871, he later became Senior Foreman on his transference to the Tropical Department. Important economic plants were propagated and despatched to the Colonies during this last period of his service at Kew, one of them being the Para rubber, *Hevea brasiliensis*.

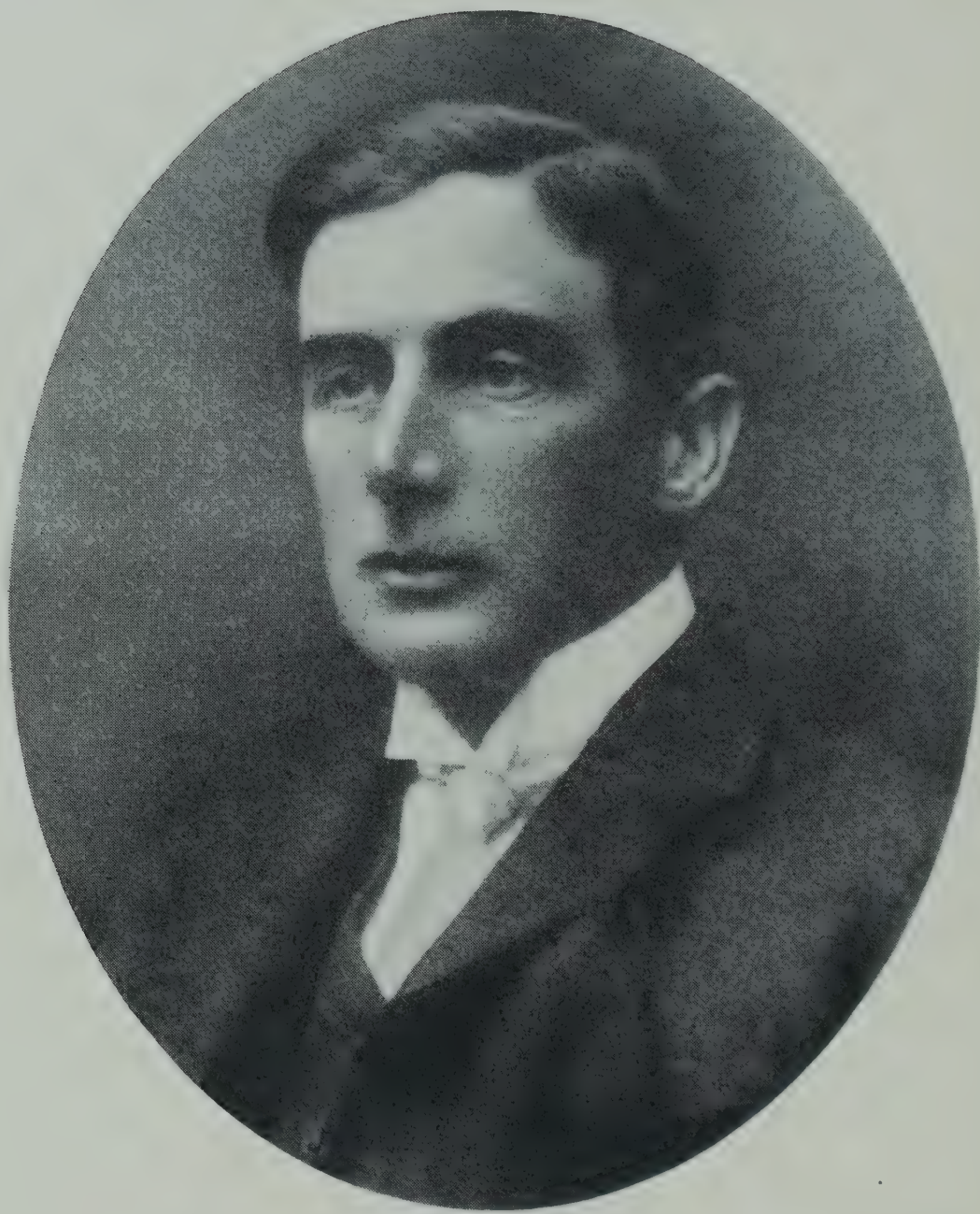
In 1879 he was appointed Curator of the Cambridge University Botanic Garden, where he had a deservedly successful career. His enthusiasm was tremendous, and the Garden became quite transformed. The collection was built up to such purpose that, twelve years after his appointment, it contained representatives of more than a quarter of the genera in Bentham and Hooker's *Genera Plantarum*. This brought the Botanic Garden second only to Kew among English public gardens. Owing to the necessity for economy, nearly all the plants acquired by Lynch during his forty years at Cambridge were received in exchange for others. A large number of those which he succeeded in flowering were found worthy of a place in the *Botanical Magazine*. He raised numerous hybrids, including the beautiful race of plants obtained by crossing *Gerbera Jamesonii* with other species of the genus.

Many papers from his pen appeared in the horticultural press, but his most valuable contribution to plant literature was *The Book of the Iris*, which he published in 1904. He

RICHARD IRWIN LYNCH (1850-1924)

also, in 1886, translated Correvon's *Les Plantes des Alpes* for the *Gardeners' Magazine*.

The Linnean Society elected Lynch an Associate in 1881. In 1901 he gained the Veitch Memorial Medal. The Victoria Medal of Honour was awarded him in 1906, and in 1923 the Royal Horticultural Society again honoured him by the award of the Veitch Memorial Gold Medal 'for his work in Horticulture.' The University of Cambridge conferred on him, in 1906, the honorary degree of M.A., which, in the words of Professor Seward, 'he thoroughly appreciated and richly deserved.' After forty years of efficient service and great achievement he was forced by ill-health to retire from the Cambridge curatorship. The end came at Torquay, Devonshire, on the 7th of December, 1924, after a rather long period of suffering.



Royal Institution of Cornwall.

JOHN CHARLES WILLIAMS, ESQUIRE

OF CAERHAYS CASTLE

TO WHOM VOLUME CXLIV.

IS DEDICATED

KEW, DECEMBER 1, 1918.

JOHN CHARLES WILLIAMS

(1861-)

BOTH botany and horticulture are under a lasting debt to Mr. J. C. Williams, of Caerhays Castle, for his encouragement of the floral exploration of western China and his discriminating study of the value of the plants of that region for English gardens.

Mr. Williams's interest in the Chinese flora has centred mainly on the woody plants, and especially the *Ericaceae*, but the search for these, in the initiation of which he has taken so active a part, has resulted in the accession to our gardens of a multitude of other fine plants. At the time when E. H. Wilson was beginning his exploration of central and western China for Veitch, there was much scepticism as to the horticultural value of the flora, and with characteristic courage, Mr. Williams, realising that the only way to decide the point was by trial under everyday conditions, secured such plants as were available, raised others from seed, and laid the foundation of the remarkable work the explorer Forrest has since done in Asia.

The catalogue of Wilsonian and, especially, Forrestian plants that first showed their quality under Mr. Williams's hand at Caerhays Castle or Werrington, and have since found their way into general cultivation, is a long one, and but for a wise restraint and a critical standard, would have been much longer. Mr. Williams was the first amateur grower to recognise the value of *Rhododendron calophytum*, which flowered at Caerhays in 1915; and the now historic trio of plants of *R. orbiculare* had been there for some years before the good points of the species were generally appreciated. It was the same with *R. Fargesii*, which flowered at Caerhays in 1911, the 'blue' form of *R. Augustinii*, and *R. Williamsianum*, which came later, as well as many

JOHN CHARLES WILLIAMS (1861-)

more. When *R. auriculatum* bloomed at Caerhays in 1912, Mr. Williams was quick to appreciate the possibilities of the species and mated it at first with *R. decorum* and then with other species. Wilson's *R. sutchuenense* is another fine species that Mr. Williams used as a parent as soon as it commenced to bloom at Caerhays in 1911.

The best of Wilson's forms of *R. Fortunei* found a welcome at Caerhays, and they too have been turned to good purpose there in the production of fine hybrid rhododendrons.

The variety *rosea*, of *Rosa Moyesii*, first showed its beautiful flowers at Caerhays, as did *Staphylea holocarpa rosea*; and among scores of lesser plants, the flowers of *Primula helodoxa*, *P. nutans* and *P. Agleniana* first saw the light of day in England at Caerhays. Appropriately enough, it remains the one place in Britain where Forrest's primrose seems thoroughly at home.

In the elucidation, too, of new Chinese species of plants, as to which Sir I. Bayley Balfour long since expressed appreciative recognition, Mr. Williams's help has been as invaluable as his kindly generosity in the distribution of new plants has been proverbial.

Mr. Williams was born on the 30th of September, 1861, and after leaving Rugby went up to Trinity Hall, Cambridge. He succeeded to the Caerhays Castle and Werrington estates on the death of his brother, and at once devoted himself to horticulture and agriculture.

Few Cornishmen can have given more of their time to the affairs of the county than Mr. Williams, and he has served on the County Council continuously for more than forty years. From 1892 to 1895 he represented the Truro division of the county in the House of Commons, and in 1918 was appointed Lord Lieutenant.

In 1885 he married his cousin, Mary Williams, and she gave him five sons and a daughter. Two of his sons fell in the War, and his eldest son, Charles, is now M.P. for the Torquay division of Devonshire.



Courtesy of the late Dr. E. H. Wilson.

ERNEST HENRY WILSON, ESQ., V.M.H.

ASSISTANT DIRECTOR OF THE ARNOLD ARBORETUM

TO WHOM VOLUME CXLV.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1919.

ERNEST HENRY WILSON

(1876-1930)

ERNEST HENRY WILSON was born at Chipping Campden, Gloucestershire, on the 15th of February, 1876. Early in life he entered the nurseries of Messrs. Hewitt at Solihull, Warwickshire, and in 1892 he was recommended to the Curator of the Birmingham Botanical Gardens as a very promising journeyman. He accepted a position at the Gardens, which were noted for a rich and varied collection of plants. Botanizing rambles on Saturdays after working hours helped to stimulate those powers of observation which later became so strongly developed in this great plant collector. He spent most of his evening leisure at the Technical School in Birmingham, where excellent facilities were provided for the study of botany. He progressed so satisfactorily in this subject that he won the Queen's prize at an examination held by the Board of Education.

In January, 1897, Wilson went to the Royal Botanic Gardens, Kew, where his talent both in the practical work and in the lecture room was soon evident. He gained high marks in the courses of lectures and won the Hooker prize of the Mutual Improvement Society for an essay on the *Coniferae*.

On the advice of friends he entered the Royal College of Science at South Kensington with a view to becoming a teacher in botany. But this was not to be.

Messrs. Veitch asked the Kew Director, Sir William Thiselton-Dyer, to recommend a suitable man to collect living plants and seeds in central China, and Wilson was chosen. He had developed a strong physique and possessed courage and perseverance, necessary attributes of the plant collector in untrodden wilds. His first journey was made in 1899, via Boston and San Francisco, and he returned in 1902. It proved so successful that he went out again, to another part of China, in the following year for the famous nursery firm. This trip, which terminated in 1905, was attended with still greater success, and his fame as a plant collector became established.

In 1906 Professor C. S. Sargent persuaded him to join the staff of the Arnold Arboretum and under its auspices continue his explorations in China. Two further journeys

ERNEST HENRY WILSON (1876-1930)

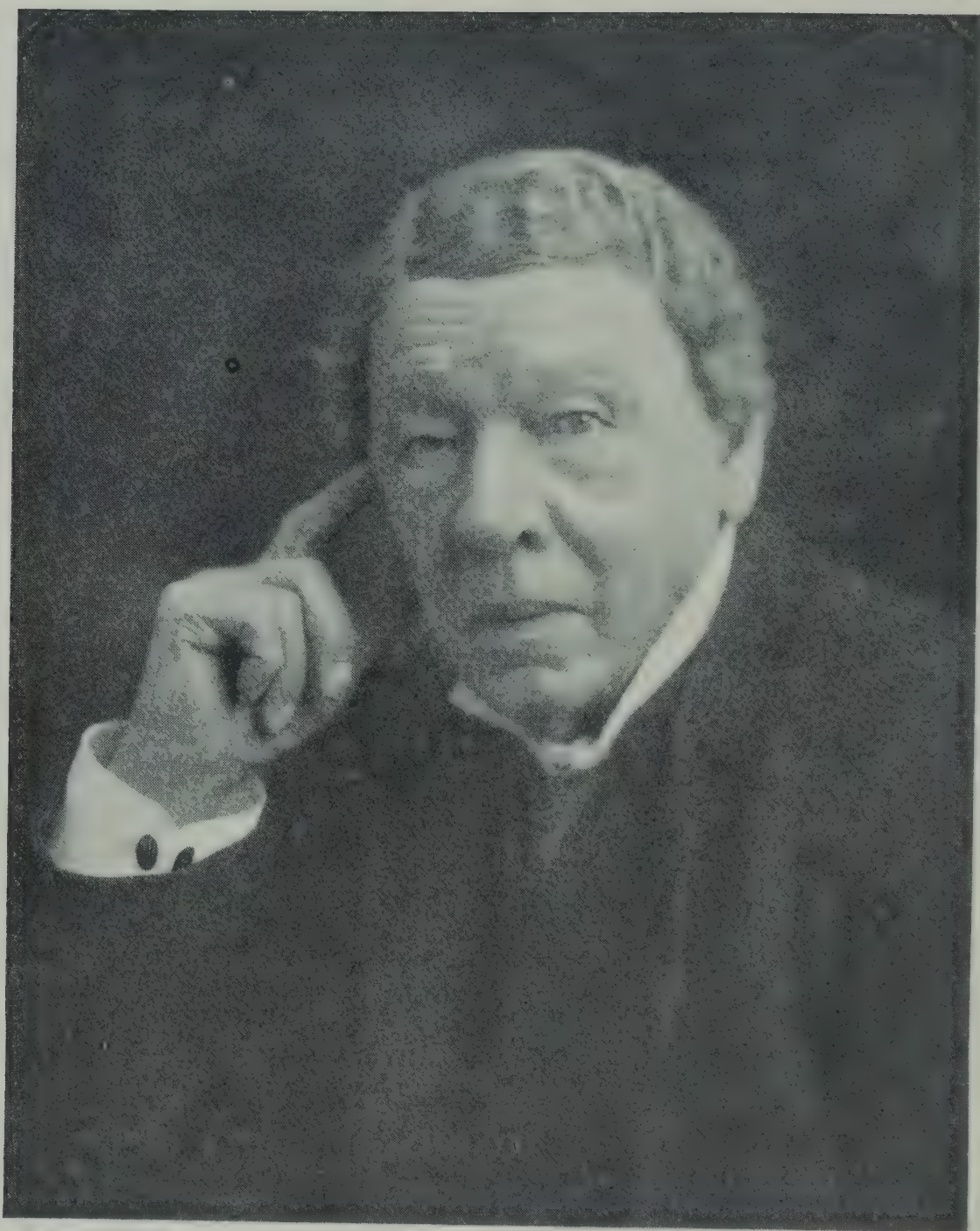
were made to China and two to parts of the Japanese Empire. So rich were the results that in China alone, as is shown in *Plantae Wilsonianae*, no fewer than 3356 species and varieties were discovered, and of these nearly nine hundred were new. From the whole of his labours have come more than a thousand new introductions to cultivation. His herbarium specimens number as many as sixteen thousand besides numerous duplicates. His plants are grown in gardens in the old world and the new.

He was appointed Assistant Director of the Arnold Arboretum in 1919, and in the following year set out on a tour to Australia, New Zealand, India, and Central and South Africa, from which he returned two years later. On the death of Professor Sargent, in 1927, Wilson was appointed to take charge, as Keeper, of the famous Arboretum.

Despite many years spent in travel he found time to write articles and books about his plant collecting and studies. His fine production, *Lilies of Eastern Asia*, was published in 1925, and a *Monograph of Azaleas*, in which Alfred Rehder collaborated, appeared in 1921. Here are more of his better known books: *A Naturalist in Western China*, 2 volumes, 1913; *The Cherries of Japan*, and *The Conifers and Taxads of Japan*, 1916; *Aristocrats of the Garden*, 1917 (second edition, 1926); *The Romance of our Trees*, 1920; *America's Greatest Garden: The Arnold Arboretum*, 1925; *Plant Hunting*, 2 volumes, 1927; *More Aristocrats of the Garden*, 1928; *China, Mother of Gardens*, 1929; and *Aristocrats of the Trees*, 1930.

In recognition of his services to horticulture, Wilson received from the Royal Horticultural Society the Veitch Memorial Medal in 1906 and the Victoria Medal of Honour in 1912. The Society also awarded him the Rhododendron Cup. He was the recipient of other horticultural medals, including the George Robert White Medal and the Geoffrey St. Hilaire Gold Medal. Harvard University conferred on him the honorary degree of M.A., and from Trinity College, Hartford, Connecticut, he received the honorary D.Sc. degree. He was a Fellow of the American Academy of Arts and Sciences. A Chinese genus of *Hamamelidaceae*, *Sinowilsonia*, was named in his honour.

His death took place on the 15th of October, 1930, near Worcester, Massachusetts, as the result of a motor car accident.



Courtesy of W. Cuthbertson, Esq.

THE REV. WILLIAM WILKS, M.A., V.M.H.

VICAR OF ST. JOHN THE EVANGELIST, SHIRLEY

TO WHOM VOLUME CXLVI.

IS DEDICATED

ROYAL BOTANIC GARDENS, KEW,
DECEMBER 1, 1920.

REV. WILLIAM WILKS

(1843-1923)

WILLIAM WILKS was born at Ashford, Kent, on the 19th of October, 1843. He was educated at a school in Clapham and at Pembroke College, Cambridge, where he took his degree in 1864.

It was early decided that he should study medicine, but after leaving Cambridge he went to Wells Theological College for two years, and was ordained to the curacy of Croydon in 1866. He became Vicar of Shirley, Croydon, in 1879, and, except for his annual holiday in Scotland or on the Continent, spent in that neighbourhood the rest of his life.

At Cambridge young Wilks's interest in plants was fostered by Professor Charles Pritchard. His father and grandfather had been keen horticulturists, and his vicar at Croydon was another garden lover. Thus Wilks was well equipped for making and maintaining a beautiful garden at Shirley vicarage.

He became a member of the Floral Committee of the Royal Horticultural Society about 1880, and was appointed Honorary Secretary to the Society on its reconstruction eight years later. The Society had reached a low ebb: it was in debt; it was following a policy adverse to horticulture; and its Fellows paying an annual subscription numbered fewer than a thousand. A return to a horticultural course was determined on by the new Secretary and the President, Sir Trevor Lawrence, and others. Daniel Morris became Honorary Treasurer, and Wilks Honorary Secretary. New offices were taken, regular fortnightly meetings were held, and the *Journal* was resuscitated. Wilks edited this for nearly twenty years.

He proved a great secretary. He saw the Society pro-

REV. WILLIAM WILKS (1843-1923)

gress from poverty to prosperity, from a membership of 1,000 to 16,000, to the possession of its fine hall and offices, and its great garden at Wisley, including a school of horticulture and a station for horticultural research. Until the Society was on a sound financial footing Wilks took no remuneration. The Society awarded him the Victoria Medal of Honour in 1912, and he was elected to the Council on his retirement from the Secretaryship in 1920. The fact that to-day the Royal Horticultural Society is the greatest of its kind in the world is due in no small measure to the zeal, the capacity to inspire others, and the singleness of purpose of William Wilks.

In collaboration with George Bunyard he prepared in 1914 a *Selected List of Hardy Fruits*. These two also collaborated in the production of an *Elementary Handbook of Fruit Culture*. Wilks issued a pamphlet on *Fruit Bottling* in 1915, and he was the editor of the reports of two genetics conferences.

Hardy plants and fruits were his favourites in the garden, but the greatest of his productions was the Shirley poppy. He got rid of the familiar black spot on the petals of the common red poppy by selection, and thus poppies of clean, pure colours, raised two centuries before and lost, were created anew and distributed freely and widely. His death took place at Shirley on the 2nd of March, 1923.

VOLUME CXLVII.

(for the year 1921) has not yet been published, but will be dedicated to Sir David Prain, Sir Isaac Bayley Balfour, and Sir Frederick Moore to commemorate their public services.

SIR DAVID PRAIN,

Portrait and Biography on pages 290-2

SIR ISAAC BAYLEY BALFOUR,

Portrait and Biography on pages 246-8

SIR FREDERICK MOORE,

Portrait and Biography on pages 326-8



Courtesy of George Forrest, Esq.

GEORGE FORREST

EXPLORER

TO WHOM VOLUME CXLVIII.

IS DEDICATED

WESTMINSTER, JUNE 1923.

THE COMMITTEE.

GEORGE FORREST

(1873-)

THE record of George Forrest marks him as one of the greatest collectors in botanical and horticultural history. He was born on the 13th of March, 1873, at Falkirk in central Scotland. His early manhood was spent in the inland parts of Australia and South Africa, and it was not till 1902 that he became attracted to the study of botany and horticulture. He worked for some time in the Herbarium of the Royal Botanic Garden, Edinburgh.

In 1904 came his opportunity. In that year he was recommended by Professor Sir Isaac Bayley Balfour to Mr. A. K. Bulley of Neston, who was anxious to secure a competent collector for plant-exploration in south-west China. This first expedition occupied the years 1904-06, and its results gave evidence of the great possibilities of the area from the point of view of European horticulture. Friction between Tibetans and Chinese made these years a period of dangerous adventure for the collector, who has given a brief account of his experiences in the *Gardeners' Chronicle* of May 21st-28th, 1910. This first expedition was a prelude to several others. He has now completed six expeditions to western China and Tibet, and is at the date of this publication engaged on the seventh.

His collections make an imposing total. On the botanical side he has secured approximately 30,000 numbers, including many hundreds of new species. The quality of the material is unsurpassed in the herbaria of the world. For horticulture he has obtained seeds of most of the desirable species, and his introductions to European cultivation are correspondingly numerous. Particularly is this true of *Rhododendron*, *Primula*, and other alpine genera. His interests extend also to the collection of mammals, birds,

GEORGE FORREST (1873-)

and insects, and many new species have been described on the zoological side. No one is better acquainted with the fauna and flora of what is probably the richest alpine area in the world, and it is hoped that on his return he will be persuaded to write a full account of his explorations.

Recognition from the horticultural world has naturally come his way—the Victoria Medal of Honour from the Royal Horticultural Society in 1920, the George Robert White Medal of Honour for Eminent Service in Horticulture from the Massachusetts Horticultural Society in 1920, the dedication of the 148th volume of the *Botanical Magazine* in 1923, similarly of the 88th volume of the *Garden* in 1924, the Veitch Memorial Medal in 1927, and the Rhododendron Cup in 1930. The Linnean Society elected him a Fellow in 1924.



Courtesy of Sir Herbert E. Maxwell, Bart.

THE RT. HON.
SIR HERBERT EUSTACE MAXWELL, BART. OF MONREITH
D.C.L., LL.D., F.R.S.

TO WHOM VOLUME CXLIX.

IS DEDICATED

BY THE ROYAL HORTICULTURAL SOCIETY.

SIR HERBERT EUSTACE MAXWELL, BART.

(1845-)

HERBERT EUSTACE MAXWELL was born in Edinburgh on the 8th of January, 1845. He was educated at Eton and Christ Church, Oxford. On leaving college he joined the territorial forces, and after twenty-one years' service retired with the rank of Lieutenant-Colonel.

He married in 1869, and succeeded his father as seventh Baronet in 1877. At the general election three years later he was returned to the Commons as Conservative member for Wigtownshire, a seat which he held until he retired in 1906. He was a Lord of the Treasury from 1886 to 1892; Chairman of the Royal Commission on Tuberculosis, 1897-98, and of the Royal Commission on Ancient Monuments (Scotland), 1907 onwards. The subject of insurance through friendly societies particularly interested him, and he was Chairman of the Select Committee on Provident Insurance in 1885-87, and of a similar Committee on Friendly Societies in 1888-89. He served on other such bodies in the eighteen-nineties, and was sworn of the Privy Council in 1897.

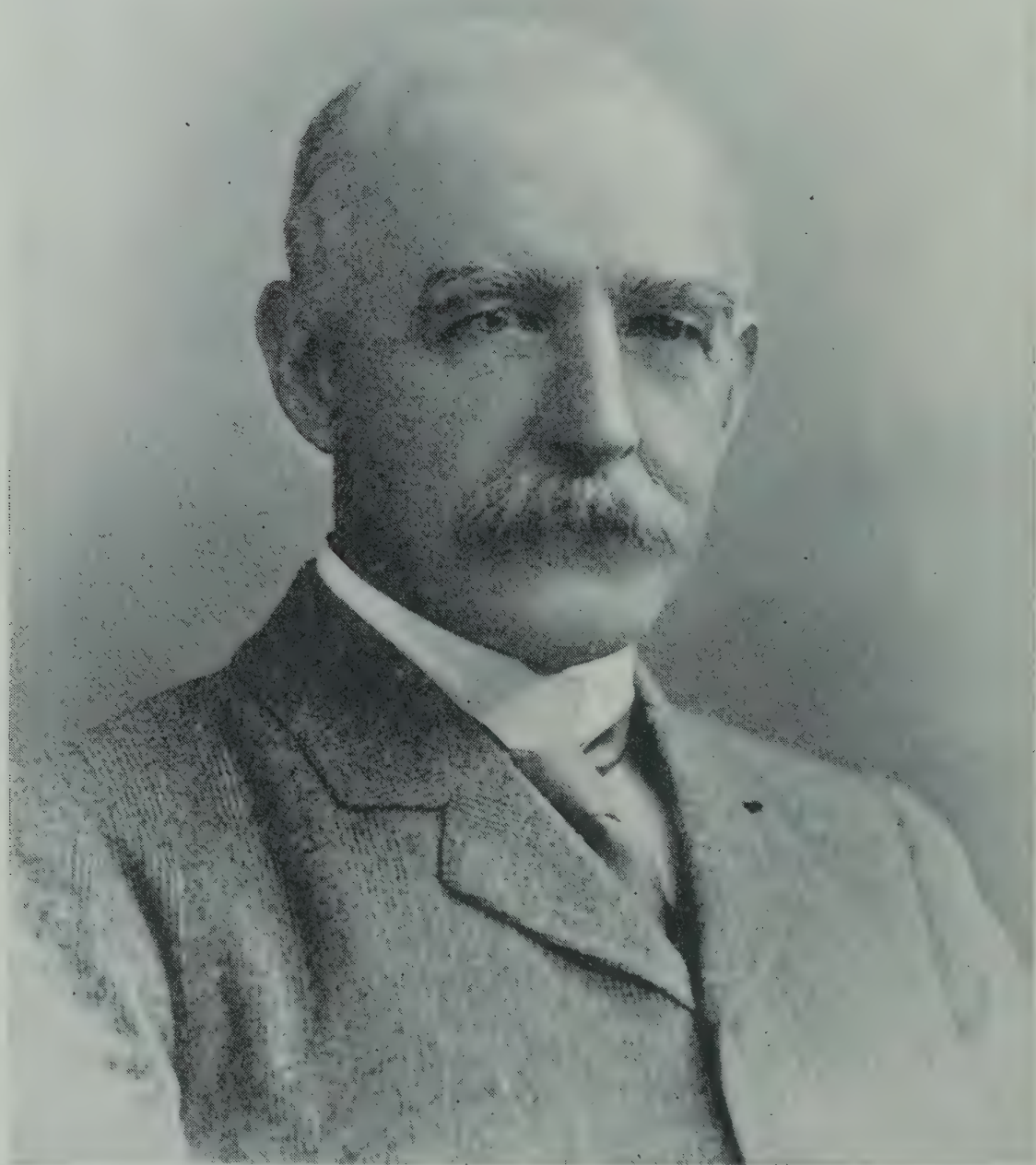
Amid these activities in the political sphere Sir Herbert developed a taste for the art of gardening, and became a recognised authority on horticultural and arboricultural matters. Those who have been privileged to visit Monreith—that interesting Galloway garden about which so many delightful accounts have flowed from his pen—can attest to the zeal and knowledge bestowed on an exceptionally rich and interesting collection. The west of Scotland, with its enviable climate, can boast of many fine gardens, but of few in which an owner's personal labour, attention, and wide experience are so successfully combined. In many branches of science and art his name is honoured, but in none is he

SIR HERBERT EUSTACE MAXWELL (1845-)

held in higher or more affectionate esteem than among those where trees and flowers are cultivated. It is given to few to possess great knowledge and at the same time the gift of imparting it with grace and charm. Yet this may be claimed for Sir Herbert Maxwell. He combines an intimate and practical knowledge of the art of gardening with an accomplished pen, in a style which never fails to delight and instruct.

Sir Herbert is the author of a considerable number of books on such diverse subjects as horticulture, biography, sport, history, geography, and archaeology. The following is by no means an exhaustive list : *Studies in the Topography of Galloway*, 1887 ; *Passages in the Life of Sir Lucian Elphin*, a novel in 2 vols., 1889 ; *Meridiana : Noontide Essays*, 1892 ; *Life and Times of the Rt. Hon. W. H. Smith*, 2 vols., 1893 ; *Post Meridiana : Afternoon Essays*, 1895 ; *Sixty Years a Queen*, and *Memories of the Months*, 1897 ; *Life of the Duke of Wellington*, 2 vols., 1899 ; *British Fresh-Water Fishes*, 1904 ; *Scottish Gardens*, 1908 ; *A Century of Empire*, 3 vols., 1909-11 ; *Early Chronicles relating to Scotland*, 1912 ; *Life and Letters of the 4th Earl of Clarendon*, 2 vols., 1913 ; *Trees : a Woodland Notebook*, 1915 ; *Edinburgh : an Historical Study*, 1916 ; and *Flowers : a Garden Notebook*, 1923. He has also contributed numerous articles on equally varied subjects to the weekly and monthly journals over a long period.

Since its formation he has been President of the Territorial Force Association of his county. His two sons died in the service of their country—one in South Africa in 1897 and the other at Antwerp at the commencement of the Great War. The Royal Society elected Sir Herbert a Fellow in 1898, and he was President of the Society of Antiquaries of Scotland from 1900 to 1913. He holds the degrees of D.C.L. and LL.D. In 1917 he was awarded the Victoria Medal of Honour by the Royal Horticultural Society.



Courtesy of Hon. Lady Ross-of-Bladensburg.

LT.-COL. SIR JOHN FOSTER GEORGE ROSS-OF-BLADENSBURG
K.C.B., K.C.V.O., LL.D., D.L., J.P.

TO WHOM VOLUME CL.

IS DEDICATED

BY THE ROYAL HORTICULTURAL SOCIETY.

LT.-COL. SIR JOHN FOSTER GEORGE ROSS-OF-BLADENSBURG

(1848-1926)

JOHN FOSTER GEORGE ROSS, second son of David Ross of Bladensburg, of Rostrevor, County Down, was born on the 27th of July, 1848. He was sent to Radley in 1861, and rowed in the School Eight in 1865.

Joining the Royal Artillery from Woolwich in 1868 he transferred to the Coldstream Guards in 1873. He was a gold medallist of the Royal United Services Institution in 1876. Two years later he was received into the Roman Catholic Church along with other members of his family. In 1878, too, he served in Turkey as Assistant British Commissioner on the International Boundary Commission, and in 1881 he was secretary to Lord Connemara on a financial mission to Constantinople. On his return he was appointed secretary to the Chief Secretary for Ireland. He took part in the Suakin campaign in 1885, receiving the medal and clasp and the Khedive's Star.

On the death of his brother, in 1892, he succeeded to the family estates and to the distinction 'of Bladensburg.' This suffix was derived from his grandfather, Major-General Robert Ross, who, after serving in the Peninsular War, commanded an expeditionary force against the United States. On the 24th of August, 1814, he routed a superior American force at Bladensburg, marched on Washington, which he took by surprise, destroyed the public buildings, and returned unmolested to his ships. A month later he was killed in an attack on Baltimore. By a Royal Warrant of 1815 his widow and descendants were granted the addition 'of Bladensburg' as a memorial of his loyalty, ability, and valour.

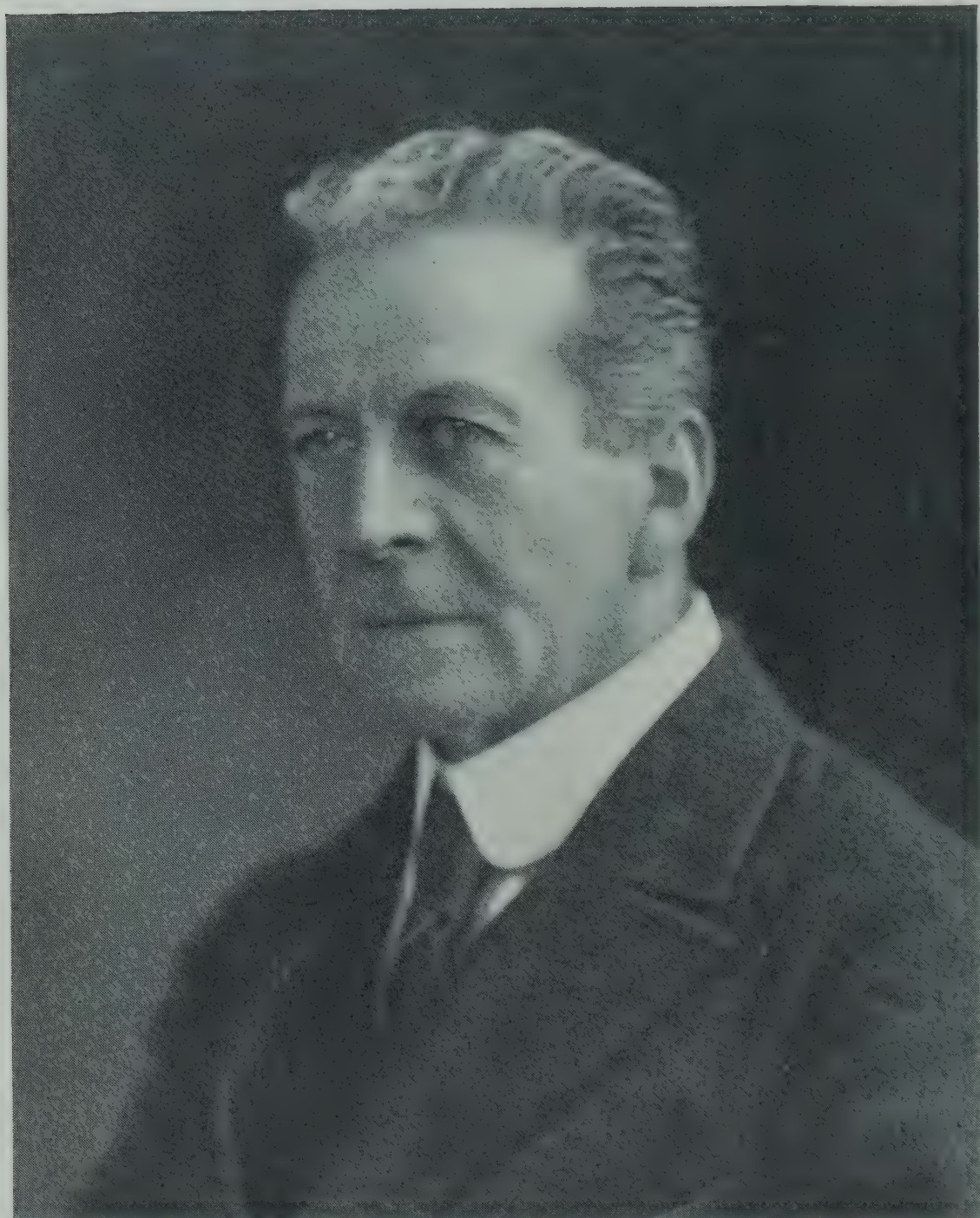
At the end of his official career John Ross threw himself

LT.-COL. SIR J. FOSTER GEORGE ROSS (1848-1926)

with zest into the cultivation of plants in his garden at Rostrevor. This is situated on Carlingford Lough, near the Mourne Mountains, and, in addition to its great natural beauty, is one of the most favoured spots in the British Isles for the growing of tender plants. North and east winds cannot enter, and a hill three hundred feet high protects it from sea breezes. The collection of shrubs and trees accumulated by Ross was one of the finest in the British Isles.

He wrote the history of the Coldstream Guards from 1815 to 1885, and also published a work on the Coldstream Guards in the Crimea. To the *Rulers of India Series* he contributed a biography of the Marquess of Hastings.

From 1901 to 1914 Ross was Chief Commissioner of the Dublin Metropolitan Police. He was created K.C.B. in 1903 and K.C.V.O. in 1911. His death took place at Rostrevor on the 10th of July, 1926.



Courtesy of E. A. Bowles, Esq.

EDWARD AUGUSTUS BOWLES, M.A., F.L.S., F.E.S., V.M.H.

GARDENER, INVESTIGATOR, AND AUTHOR

TO WHOM VOLUME CLI.

IS DEDICATED

By THE ROYAL HORTICULTURAL SOCIETY

EDWARD AUGUSTUS BOWLES

(1865-)

EDWARD AUGUSTUS BOWLES was born at Myddelton House, Enfield, Middlesex, on the 14th of May, 1865. He was educated at home until 1884, when he went to Jesus College, Cambridge, taking his degree in theology in 1887.

On leaving Cambridge he devoted himself to social work and gardening. In his study of plants and their cultivation he received much help and encouragement from the amateur pioneers of present-day gardening, and especially from his friend Canon Ellacombe of Bitton fame. His love and enthusiasm for plants are well known to those who have visited the garden of Myddelton House and seen its rich collections gathered from all parts of the world, and in part collected by himself. Bulbous plants have claimed his special attention.

In 1914 appeared two illustrated works by Bowles, entitled *My Garden in Spring* and *My Garden in Summer*. The third of the series, *My Garden in Autumn and Winter*, was issued in 1915. In 1924 was published his most important work, *A Handbook of Crocus and Colchicum for Gardeners*.

These works and the many articles by him on his favourite plants that have appeared in horticultural journals have been illustrated by his own draughtsmanship, the excellence of which has been recognised by the award of the Royal Horticultural Society's Grenfell Medal in gold.

Bowles served on the Council of the Royal Horticultural Society from 1908 to 1926, and was re-elected in 1928. He became a member of its Scientific Committee in 1902, and a Vice-Chairman in 1907, and has acted as Chairman

EDWARD AUGUSTUS BOWLES (1865-)

of the Narcissus and Tulip Committee since 1911. In 1926 he was first elected a Vice-President of the Society.

The Victoria Medal of Honour was awarded him in 1916; and in 1923, for his work on crocuses, colchicums, and other garden plants, he was presented with the Veitch Memorial Gold Medal.



Courtesy of Miss Jekyll.

GERTRUDE JEKYLL, V.M.H.

GARDENER AND AUTHORESS

TO WHOM VOLUME CLII.

IS DEDICATED

BY THE ROYAL HORTICULTURAL SOCIETY.

GERTRUDE JEKYLL

(1843-)

GERTRUDE JEKYLL, younger daughter of Edward Joseph Hill Jekyll, formerly a captain in the Grenadier Guards, was born in London on the 29th of November, 1843.

That she was attracted by flowers at a very early age is well shown in the fact that she remembers the daisies in Berkeley Square and the dandelions in the Green Park, although the family left London for a country home—Bramley House, in south-west Surrey—when she was but four and a half years old. She soon got to know the primroses, blue-bells, anemones, and violets of the Surrey woodlands. A governess with some knowledge of wild flowers and ferns encouraged a search for these on the daily walks.

Cultivated plants had perhaps an even greater appeal for her. She derived great pleasure from wandering alone in the large shrubbery at Bramley House, which was unusually well planted for the period.

Meanwhile, Miss Jekyll was learning to draw and paint, for her great desire in early life was to become a painter. It has been a lifelong regret to her that trouble with the eyes prevented the fulfilment of those hopes. But the early training, beginning with study in the British Museum and an intense admiration for the wonder of Greek art, followed by instruction in art schools in London and Paris and later in Rome, have not been by any means without result.

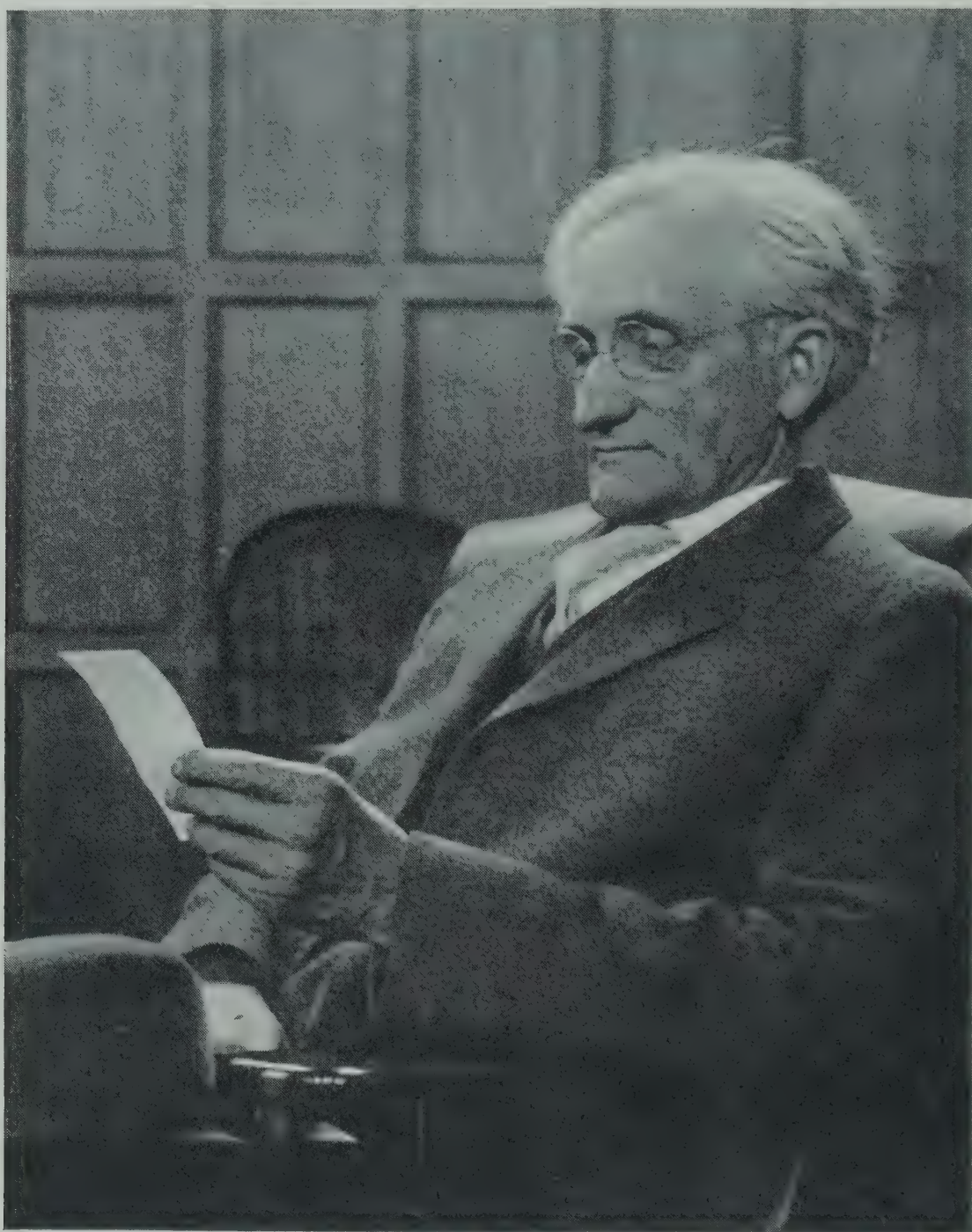
Her personal success as a painter was frustrated to provide a great gain to the art of gardening. The skill and knowledge acquired enabled her in her middle and later life, which has been devoted to horticulture, to see the possibilities of gardening as a fine art, to advise the substitution of good colour harmonies for the older garish contrasts, and

GERTRUDE JEKYLL (1843-)

to infuse something of this feeling into the planning of gardens. In this work leading to the evolution of the modern garden Miss Jekyll has been associated with other enthusiasts such as W. Robinson, founder of the *Garden*, Miss Willmott, the Rev. C. Wolley-Dod, G. F. Wilson, Canon Ellacombe, Dean Hole, and the Rev. G. Engleheart.

Miss Jekyll's books on gardening bear the same refreshing contrast to those of the past as her garden schemes do to those they have displaced. Press and public alike have accorded them unstinted praise. *Wood and Garden* appeared in 1899; *Home and Garden* in 1900; and in 1901 *Wall and Water Gardens* and *Lilies for English Gardens* were published. These were followed by *Roses for English Gardens*, 1902; *Flower Decoration in the House*, 1907; *Colour in the Flower Garden*, and *Children and Gardens*, 1908; *Gardens for Small Country Houses* (with Sir L. Weaver), 1912; *Annuals and Biennials*, 1917; and *Garden Ornament*, 1918.

Miss Jekyll's great services to gardening have been recognised by the Royal Horticultural Society. She was one of the original recipients of the Victoria Medal of Honour in 1897, and was awarded the Veitch Memorial Gold Medal in 1922.



Courtesy of Dr. L. H. Bailey.

LIBERTY HYDE BAILEY

TEACHER, ADMINISTRATOR, BOTANIST

TO WHOM VOLUME CLIII.

IS DEDICATED

BY THE ROYAL HORTICULTURAL SOCIETY.

LIBERTY HYDE BAILEY

(1858-)

LIBERTY HYDE BAILEY was born at South Haven, Michigan, on the 15th of March, 1858. His parents had created a farm from the wilderness near Lake Michigan, and young Bailey was trained as an agriculturist from an early age. The wild life of the neighbourhood greatly attracted him, and he tried to classify the plants by a system of his own.

After graduating B.S. from Michigan Agricultural College in 1882, he went as assistant to Asa Gray at Harvard. During his training under that great botanist he became familiar with plants from all over the world. He was Professor of Horticulture at Michigan Agricultural College from 1885 to 1888, and at Cornell University from 1888 till 1903. Then, at Cornell, from 1903 to 1913, he was Dean and Director of the College of Agriculture.

Bailey has played a leading part in the development of a literature of agriculture and horticulture. Probably no other man has placed so many books on these subjects at the command of readers and students. He organised this literature, partly made it himself, and encouraged others to contribute to it; and his editorial skill has helped to shape it all.

Three cyclopedias are among his literary achievements: the *Cyclopedia of American Agriculture*, in four volumes; *Cyclopedia of American Horticulture*, also in four volumes, and on which was founded the *Standard Cyclopedia of Horticulture*, in six volumes, afterwards reissued in a three-volume edition. He has published more than a hundred volumes, of which the following are a selection: *Plant-Breeding*, 1895 (the first work under this title), which has gone into several editions; *Principles of Fruit Growing*, 1897 (20th edition, 1915); *Principles of Agriculture*, 1898;

LIBERTY HYDE BAILEY (1858-)

Principles of Vegetable Gardening, 1901 ; *Manual of Gardening*, 1910 ; *Farm and Garden Rule-Book*, 1911 ; *Pruning-Manual*, 1916 ; *Nursery-Manual*, 1920 ; *The Cultivated Evergreens*, 1923 ; and a *Manual of Cultivated Plants*, 1924. He has also written several philosophical and poetical works. In addition he has edited books in series. These include the *Rural Science Series*, the *Rural Text-Book Series*, and the *Rural Manual Series*.

The Royal Horticultural Society awarded Bailey the Veitch Memorial Medal in 1898 and the Veitch Gold Medal in 1927. He was the recipient also of other medals, including the George Robert White Medal of Honor from the Massachusetts Horticultural Society in 1927.

He was Chairman of the Roosevelt Commission on Country Life, 1908, and has been a leader in the rural movement in the United States. Horticultural Societies, including our own Royal Horticultural Society, have made him an Honorary Member. He is a Fellow and Past President of the American Association for the Advancement of Science, a Fellow of the American Academy of Arts and Sciences ; Member of the American Philosophical Society and of the National Academy of Sciences. He is also Past President of the Botanical Society of America and of the American Society for Horticultural Science. The degree of LL.D. of the University of Wisconsin is held by him, and he is a Litt.D. of the University of Vermont.

Since his retirement from administrative life Dr. Bailey has built up a large personal herbarium which is especially rich in cultivated plants, and from which a series of botanical publications is being issued under the title of *Gentes Herbarum*. He has collected in foreign countries, giving particular attention to palms and certain tropical groups.

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ವ.ಸಂಖ್ಯೆ:.....

ಈ ಕೆಳಗೆ ಕಾಣಿಸಿರುವ ದಿನದಂದು ಅಥವಾ ಅದಕ್ಕೂ ಮುಂಚೆ ಈ ಪುಸ್ತಕವನ್ನು ಹಿಂದಿರುಗಿಸಬೇಕು. ಅಥವಾ ಮುಂಚಿತವಾಗಿ ನವೀಕರಿಸಬೇಕು. ಇಲ್ಲದಿದ್ದರೆ ಒಂದು ದಿನಕ್ಕೆ ರೂ.1.00 ದಂಡ ಕೊಡಬೇಕಾಗುತ್ತದೆ.

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ಪು.ತಿ.ನೋ..

**ತೋಟಗಾರಿಕೆ ಇಲಾಖೆಯ
ಗ್ರಂಥಾಲಯ**

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